CATALOG 2014-2015



Stark State College

www.starkstate.edu

STARK STATE COLLEGE



6200 Frank Avenue NW | North Canton, Ohio 44720 | 330-494-6170 | 800-797-8275 | www.starkstate.edu

Stark State College

Ohio Board of Regents
University System of Ohio

John R. Kasich, Governor
John Carey, Chancellor

Welcome to Stark State College and the University System of Ohio

Access to Ohio's state-assisted colleges must be assured for every person who wants and can benefit from higher education. Stark State College cordially welcomes anyone who wishes to receive a higher education.

According to Section 3345.06 of the Ohio Revised Code, "A graduate of the twelfth grade should be entitled to admission without examination to any college or university which is supported wholly or in part by the state."

Open admission carries with it the full weight of equal opportunity for all, which means the College must make every effort to be sensitive and responsive to the needs of prospective students. The open admission policy allows a student to enroll in the College, but not necessarily in a specific degree-granting program.

Normal admission to the College is open to anyone who is a high school graduate or the equivalent, completes the enrollment procedures and pays the fees for admission. This is exclusive of academic record or placement testing results. This open door policy does not deny specific academic departments the right to require preliminary training or talent.

Students who do not meet specific program requirements upon admission to the College may be required to satisfactorily complete such requirements before admission into a specific program.

NOTE: Stark State College reserves the right to make changes in offerings, requirements and regulations subsequent to the publication of the catalog. A student accepted into a specific associate degree or one-year certificate program, and who is completing the coursework on a part-time or full-time basis after a lapse of years, should seek periodic advising from the appropriate department chair due to possible changes to the requirements.

Stark State College is committed to equal opportunity for all and does not discriminate on the basis of race, color, religion, sex, gender, national origin, military status, disability, age, genetic information, or sexual orientation. For inquiries regarding the College's non-discrimination policies (Section 504, Title IX and Title VI) contact Renee Lilly at 330-494-6170, Ext. 4250 or rlilly@starkstate.edu.

6200 Frank Ave. N.W. | North Canton, OH 44720-7299
330-494-6170 | 800-79-STARK

For most current class schedule: www.starkstate.edu

Stark State College

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President, Stark State College

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Provost and Chief Academic Officer

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Vision Statement

Stark State College will be a leader in higher education and a catalyst for economic growth and community prosperity.

Mission Statement

Stark State College provides quality, high-value associate degrees, certificates, and professional development in a diverse, student-centered learning environment. The College is dedicated to lifelong learning; affordable, transferable higher education; and career success. Stark State College advances quality of life through access, academic success, stewardship, and business and community partnerships.

General Learning Outcomes

PURPOSE STATEMENT

General education provides students with a breadth of knowledge and capacity for lifelong learning. It stretches students' minds, broadens their experiences, and develops skills to adapt to changing environments. General education prepares students with the skills to communicate effectively, problem solve, analyze, locate and gather information, and think critically and logically. It teaches students to understand and appreciate diversity and its interrelationships, sustainability, as well as community engagement and informed citizenship. Students are taught personal integrity, social responsibility, and the interpersonal skills needed to succeed in a professional environment.

Our general education philosophy is embedded in our mission and vision and is supported by our core values. These core values serve to emphasize our commitment to our students, to learning, to shared responsibility, and to the continuous improvement of the education we offer. We work collaboratively to create a campus culture that is academically challenging and emotionally supportive.

EFFECTIVE COMMUNICATION (WRITTEN, ORAL, READING, AND LISTENING)

- Organize and develop ideas effectively.
- Present ideas in an appropriate, mechanically and grammatically correct, professional style.
- Follow a standardized documentation format.

QUANTITATIVE LITERACY (INCLUDES COMPUTATIONAL SKILLS)

- Determine a solution strategy and set up the problem with the pertinent information.
- Solve the problem using the appropriate data, the mathematical operations (symbols and formulas), and the appropriate technology (such as calculators and computers) as needed.
- Analyze and interpret the results for accuracy and reasonableness and explain the results using such tools as graphs, charts, and tables as needed.

INFORMATION LITERACY SKILLS

- Locate, evaluate, and use effectively the needed information.
- Manipulate current software and hardware to access and communicate information appropriately.
- Understand copyright rules and the ethics of extracting, sharing, and citing source information.

CRITICAL THINKING SKILLS

- Understand and interpret data by analyzing and synthesizing information.
- Challenge assumptions and draw informed and logical conclusions.
- Test conclusions against relevant criteria and standards while considering practical and ethical implications.

GLOBAL AND DIVERSITY AWARENESS

- Demonstrate appreciation and respect for individuals and groups and use effective interpersonal and collaboration skills.
- Demonstrate awareness of the interdependence of factors of diversity: culture, history, sexual orientation, psychological functioning, education, economics, environment, geography, language, politics, age, gender, ethnic heritage, physical challenges, social class, social skills, and religion.

CIVIC, PROFESSIONAL, AND ETHICAL RESPONSIBILITY

- Demonstrate personal integrity and social responsibility consistent with ethics, individual rights, principles of sustainability, and civility in a democratic society.
- Accept responsibility for and act in a manner that reflects the values of the communities and organizations.
- Relate to others in a respectful, courteous, and professional manner.

Stark State College Profile

Stark State College is committed to preparing our students for career success in a competitive, sophisticated economy. Our graduates are in demand by employers who recognize their high skill level and readiness to succeed.

Our students receive a high-quality education at an affordable cost. It's a formula that works, thanks to our

- dedicated and experienced faculty
- convenience, efficiency and affordability
- mission of access, student success and economic development.

Stark State is the largest of Stark County's colleges and universities, and the fourth largest of Ohio's 23 public two-year colleges in the University System of Ohio. We offer more than 230 associate degrees, options, one-year and career enhancement certificates in business and entrepreneurial studies, education, engineering technologies, health and human services, information technologies, liberal arts, mathematics and sciences.

The College awards associate of arts, associate of science, associate of applied science, associate of applied business and associate of technical studies degrees. We also offer associate degrees in conjunction with Kent State University. Our wide range of short-term career enhancement certificates help employees improve skills and gain a competitive edge in a marketplace of rapidly changing technology, and can lead to one-year certificates and associate degrees in a variety of fields.

AFFORDABLE, TRANSFERABLE EDUCATION

Students often get their start at Stark State through our affordability and transferability. The associate of arts (AA) and associate of science (AS) degrees open pathways for graduates to pursue a baccalaureate degree in virtually any area of study.

Stark State offers a transfer module of 36-40 semester hours of credit courses guaranteed to transfer to all state-supported colleges and universities in Ohio. The College also has articulation agreements with more than 40 universities and colleges, allowing our students to move smoothly from associate degree programs into baccalaureate degree programs.

Not only does Stark State maintain a low tuition rate, our knowledgeable financial aid specialists help students explore the many grants, loans and scholarships that can help finance their education. More than half of all Stark State students have no out-of-pocket education expenses, thanks to scholarships and financial aid.

PARTNERS IN ECONOMIC GROWTH AND DEVELOPMENT

Well-respected in the community, Stark State College plays a vital role in the economic growth and development of the region through its strong tradition of providing credit and noncredit educational and training services to employers and residents. Our community and business partnerships are vital to the area. An on-campus partnership with LG Fuel Cell Systems, Inc. positions Stark State as a leader in supporting fuel cell research, development and commercialization, while our partnerships with oil and gas companies and The Timken Co. in its technology and test center gives our students applied research and training opportunities. These collaborations also fuel economic development, creating new industries and jobs for Stark County.

Canton Mayor William Healy II has said he's amazed at "how flexible Stark State is in being able to quickly ramp up to meet the needs of current and potential employers. Stark State is one of the greatest assets I have in selling Stark County to potential businesses."

FACILITIES THAT SERVE OUR COMMUNITY

The College's Dental Hygiene Clinic provides services to area residents at reduced rates by students-in-training under the expert supervision of dentists and faculty members. The Massage Therapy Clinic offers the community affordable therapeutic massage while providing our massage therapy students the opportunity to apply their knowledge and skills in a supervised setting.

Several new sustainably progressive buildings have opened in recent years to accommodate Stark State's rapid growth. Our LEED-certified Business and Entrepreneurial Studies Building, for instance, is a 47,700-square-foot home to more than 30 degrees, options and certificates in accounting, business management, corporate finance, entrepreneurship, marketing management and other programs, along with a business incubator program.

A $9 million health sciences building accommodates the region's growing need for highly skilled health care workers. The W.R. Timken Center for Information Technology houses the information technology and engineering technology classrooms. The Ralph Regula Wellness and Therapy Center is an educational center for students studying physical therapy assisting and occupational therapy assisting. The Automotive Technology Center, located off-campus on Whipple Avenue is a 40,000-square-foot facility housing the automotive and transportation technologies, and a site in downtown Canton for second-year automotive technology students allows the program to expand to meet community demand.

EXPERIENCED, CREDENTIALED FACULTY SERVE OUR DIVERSE STUDENTS

The average Stark State student fits the profile of the typical two-year college student in the nation: 60% of SSC students are female, 65% attend college part time, 29% are minorities and 46% are the first generation in their families to attend college. The average age of Stark State's students is 28, and the majority of our students hold jobs while in school.

The College has more than 200 full-time faculty and nearly 500 adjunct faculty. More than 60% of the College's full-time faculty members have master's degrees and 12% have doctorate degrees. The fact that many instructors and professors are hired with extensive expertise in their fields strengthens the College curriculum and provides students greater opportunity for "real world" application of both technical and general knowledge in their majors.

Our advisory committee system means 300 individuals representing more than 170 companies and organizations review curriculum and provide input on current trends in their industries.

Stark State College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Many technology programs also are accredited by their respective licensing/accrediting organizations.

Stark State is located in northern Stark County adjacent to Interstate 77, conveniently located for students from Stark, Carroll, Columbiana, Holmes, Medina, Portage, Summit, Tuscarawas and Wayne counties. Satellite centers are located in Alliance, Barberton, Carrollton and Downtown Canton.

For the most current academic and student conduct policies, as well as additional policies and procedures of interest to students, go to ***www.starkstate.edu/policies***. Printed copies may be requested in the Office of Admissions/Student Services.

Accreditations and Program Approvals

STARK STATE COLLEGE IS ACCREDITED BY

The Higher Learning Commission of the North Central Association of Colleges and Schools, 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1411; 312-263-0456 or 800-621-7440; Fax 312-263-7462; info@hlcommission.org; www.ncahlc.org

BUSINESS AND ENTREPRENEURIAL STUDIES ACCREDITATIONS

ACCOUNTING, CORPORATE FINANCE, FINANCIAL SERVICES, BUSINESS MANAGEMENT and MARKETING MANAGEMENT Accredited by the Accreditation Council for Business Schools and Programs, 11520 West 119th Street, Overland Park, KS 66213; (913)339-9356; info@acbsp.org; www.acbsp.org

EDUCATION ACCREDITATIONS

EARLY CHILDHOOD EDUCATION Accredited by the Ohio Department of Education: Certification and Licensure, Ohio Department of Education, 25 South Front Street, Columbus, OH 43215; 614-466-3593; www.ode.state.oh.us

ENGINEERING TECHNOLOGIES ACCREDITATIONS

AUTOMOTIVE AND TRANSPORTATION (Comprehensive, GM-ASEP, Honda PACT, Toyota T-TEN) Accredited by the National Automotive Technicians Education Foundation (NATEF); 101 Blue Seal Drive SE, Suite 101, Leesburg, VA 20175; www.natef.org

CIVIL ENGINEERING TECHNOLOGY, DESIGN ENGINEERING TECHNOLOGY, ELECTRICAL ENGINEERING TECHNOLOGY, ELECTRONIC ENGINEERING TECHNOLOGY and MECHANICAL ENGINEERING TECHNOLOGY Accredited by the Engineering Technology Accreditation Commission of the Accreditation Board of Engineering and Technology (ETAC of ABET): 111 Market Place, Suite 1050, Baltimore, MD 21202-4012; 410-347-7700; www.abet.org

HEALTH AND HUMAN SERVICES ACCREDITATIONS

DENTAL HYGIENE PROGRAM The dental hygiene program is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body of the American Dental Association recognized by the United States Department of Education: Commission on Dental Accreditation, American Dental Association, 211 E. Chicago Avenue, Chicago, IL 60611; 312-440-4653; www.ada.org/117.aspx

DIETARY MANAGER PROGRAM The dietary manager program is accredited by the Association of Nutrition and Foodservice Professionals, 406 Surrey Woods Drive, St. Charles, IL 60714; 800-323-1908; www.anfponline.org

FIRE/EMERGENCY MEDICAL All accreditation in these two areas is through: Department of Public Safety/Division of EMS, 1970 West Broad Street, P.O. Box 182073, Columbus, OH 43218-2073; 800-233-0785; www.ems.ohio.gov

HEALTH INFORMATION MANAGEMENT The health information management technology program is accredited by the Commission on the Accreditation of Health Informatics and Information Management Education (CAHIIM) in cooperation with the American Health Information Management Association's Council on Accreditation: CAHIIM 233 N. Michigan Avenue, 21st Floor, Chicago, IL 60601-5800; 312-233-1131; www.cahiim.org

MASSAGE THERAPY CERTIFICATE PROGRAM - ASSOCIATE OF TECHNICAL STUDIES IN MASSAGE THERAPY Approved by the State Medical Board of Ohio: State Medical Board of Ohio, 30 E. Broad Street, 3rd Floor, Columbus, OH 43215-6127; 614-466-3934

MEDICAL ASSISTING The Stark State Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Medical Assisting Education Review Board (MAERB) Commission on Accreditation of Allied Health Education Programs; 1361 Park Street, Clearwater FL 33756; 727-210-2350; www.caahep.org

OPHTHALMOLOGY ASSISTANT Accredited by the Committee on Accreditation for Ophthalmic Medical Personnel (CoA-OMP) who is sponsored by the Joint Commission on Allied Health Personnel in Ophthalmology, Inc. (JCAHPO Association of Technical Personnel in Ophthalmology (ATPO), Consortium of Ophthalmic Training Programs (COTP), 2025 Woodlane Drive, St. Paul, MN 55125-1992; 800-284-3937

MEDICAL LABORATORY TECHNOLOGY Accredited by NAACLS (National Accrediting Agency for Clinical Laboratory Sciences): National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Rd., Suite 720, Rosemont, IL 60018-5119; 847-939-3597; www.naacls.org

NURSING Provisional approval status from the Ohio Board of Nursing and is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN – formerly NLNAC), 3343 Peachtree Road, NE, Suite 850, Atlanta, GA 30326; 404-975-5000 (phone); 404-975-5020 (fax); www.acenursing.org, www.nursing.ohio.gov

OCCUPATIONAL THERAPY ASSISTANT PROGRAM Accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA): AOTA, 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220; 301- 652-AOTA; www.aota.org

PHYSICAL THERAPIST ASSISTANT PROGRAM Accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association: Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association, 1111 North Fairfax Street, Alexandria, VA 22314; 703-706-3245; http://www.capteonline.org/home.aspx; www.apta.org

RESPIRATORY CARE The respiratory care program is accredited by the Commission on Accreditation for Respiratory Care (CoARC): 1248 Harwood Road, Bedford, TX 76021-4244; 817-283-2835; www.coarc.com

INFORMATION TECHNOLOGIES ACCREDITATION

ADMINISTRATIVE OFFICE PROFESSIONAL and LEGAL ASSISTING Accredited by the Accreditation Council for Business Schools and Programs, 11520 West 119th Street, Overland Park, KS 66213; (913)339-9356; info@acbsp.org; www.acbsp.org

JUDICIAL REPORTING (Day), BROADCAST CAPTIONING, AND ONLINE PROGRAMS Accredited by Council on Approved Student Education National Court Reporters Association (NCRA): NCRA, 8224 Old Courthouse Road, Vienna, VA 22182-3808; 703-556-6272; www.ncraonline.org

eSTARKSTATE APPROVAL

Stark State College has been approved to offer online degrees by The Higher Learning Commission of the North Central Association of Colleges and Schools, 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1411; 312-263-0456 or 800-621-7440; Fax 312-263-7462; info@hlcommission.org; www.ncahlc.org

Information about the approval process for listed programs may be requested from the respective division office or by contacting the approving agency directly.

Admission Procedures

Applying at Stark State College is easy. Follow this checklist, and if you need help along the way, call 330-494-6170 and ask for admissions.

Apply for admission
Complete your application online at www.starkstate.edu or submit a paper application to the Financial Aid/Registration Office in S308.

New student orientation
Orientation provides students with essential information for successfully beginning and progressing toward their academic goals. You're required to complete a new student orientation before you can register for classes. Register for an in-person session (the best way to get your questions answered) or an online orientation at www.starkstate.edu/orientation. You'll need your student identification number to reserve your seat.

Submit your documents
To register for courses you'll need to supply your official high school transcript – contact your high school office to get your records – and these, if they apply for you:

- GED certificate and scores (bring the originals to S308, and we'll make a copy)
- Official transcripts from any colleges you previously attended (transfer students only)
- Selective Service number (males ages 18-26; register or receive a number at www.sss.gov or call toll-free 847-688-2567)

Placement assessment
Provide your ACT scores (if you've taken the test within the last two years)

–OR–

Set up an appointment to take the COMPASS assessment; call 330-494-6170 or stop in S305.

–OR–

Have the results of any COMPASS assessment you've taken in the past two years at another college or university sent to the SSC Office of Admissions/ Student Services.

Apply for financial aid
You'll need to complete the FAFSA (Free Application for Federal Student Aid) to apply for financial aid. Go to www.fafsa.ed.gov and use the Stark State school code of 011141.

Visit the Financial Aid/Registration Office in S308 or the financial aid web page at www.starkstate.edu/finaid for a detailed checklist.

Meet with an advisor
As a new SSC student, you'll need to meet with an advisor before registering for classes. Call 330-494-6170, Ext. 4228 or 1-800-797-8275 to make an appointment.

Log on to mystarkstate
Your letter of acceptance to Stark State will tell you how to log on to mystarkstate, where you'll find student information, including how to track the progress of your admission and financial aid applications.

See how Stark State's tuition compares to other colleges and universities: www.starkstate.edu/tuitioncomparison

TRANSFER APPLICANTS

Coursework from other regionally accredited institutions of higher education designated in the Transfer Credit Practices of Designated Educational Institutions of the American Association of Collegiate Registrars and Admission Officers will be evaluated upon receipt of an official transcript.

TRANSIENT/GUEST STUDENTS

A transient/guest student is a student who plans to enroll at Stark State College on a temporary basis. Follow these steps to complete the admissions process:

1. Complete a Stark State College application. The application is available online at www.starkstate.edu or by contacting the Office of Admissions/ Student Services at 330-494-6170.
2. Receive academic advising and approval from home institution for course(s) planned for enrollment at Stark State. Submit written approval from home institution to Stark State College Academic Records/Registrar's Office indicating the course(s) for enrollment.
3. Meet with a Stark State admissions counselor to review enrollment process. Contact the Office of Admissions/Student Services at 330-494-6170 with questions.

INTERNATIONAL STUDENT ADMISSIONS

Stark State College welcomes qualified students from other countries and seeks to make their educational experience pleasant and meaningful. All admissions requirements must be completed two months prior to start date.

1. In addition to those records mentioned under "Admissions Procedures" for all students, the following is required of the international student¬
- Proof of English language proficiency. Submit scores from the Test of English as a Foreign Language (TOEFL). This test is administered throughout the world in major cities. Registration materials for the test may be obtained by applying to TOEFL, Box 899, Princeton, NJ 08541.
- Proof of adequate finances to meet the costs of fees, books, health insurance, room and board off-campus, transportation and personal expenses while attending Stark State College.
- Proof of satisfactory completion of a program of education which is equivalent to high school in the United States. Any degree, diploma or certificate should be supported by a certified copy of the document and a translated copy where the original is not English.
- All foreign transcripts and documents must be translated into English and validated by an appropriate international translating agency.
- A copy of your VISA/passport and admission number on your I-94 if currently in the United States.

2. Upon receipt of the aforementioned documents, the applicant for admission as an international student will receive a conditional acceptance letter. The acceptance is conditioned upon the applicant transferring adequate finances to Stark State College, which will be held in trust for the student. The student may withdraw trust account funds to meet reasonable expenses while attending Stark State College. The remainder of the trust account will be returned to the student upon graduation, transfer to another college or termination of attendance and departure from the United States.
3. Upon the receipt of funds from the applicant, the College will forward a letter of acceptance and the forms necessary to obtain a student visa.
4. To maintain a satisfactory student status at Stark State College, the international student must

- be taking a full course of studies,
- make satisfactory progress toward the degree goal, and
- maintain a final balance to cover tuition and fees in the student's trust account at the College.

mystarkstate PORTAL AND BANNER SELF SERVICE

The mystarkstate Web portal provides students with Web access to the College's student system, including a full suite of Web-based self-service capabilities:

- review enrollment information
- search for and register for classes
- view midterm and final grades
- view degree audit evaluation
- check registration and financial account holds
- check financial aid status and award amount
- pay tuition with credit card or check
- change personal information
- request a Stark State College transcript or enrollment verification
- track status of documents submitted for financial aid
- view advisor and program information

The mystarkstate portal is a service-oriented Web portal environment that is the single focal point for College electronic communication, information and services. The portal provides a single access point and single sign-on for many services available at Stark State College, including a full suite of Web-based Banner Self Service capabilities, ANGEL and email.

Note: NEW students must enroll in person for classes.

ACADEMIC ADVISING

The academic advising process at Stark State College is a significant aspect of student development. More than helping schedule courses, this process helps students fulfill their potential. To achieve this objective, faculty and counseling personnel are available to advise students in person or online. Every faculty member is an advisor to students enrolled in his/her course. The faculty member is the best source of information pertaining to a course. Students enrolling for 21 or more credit hours must have an academic advisor's signature.

Depending on student need, the academic advising process may involve

- analysis of the student's long-range aspirations, goals and abilities
- analysis of educational and career objectives
- selection of academic major
- planning course sequence in academic major
- class scheduling
- continuous assessment and possible referral

PLACEMENT TESTING

Every first-time Stark State College degree-seeking student is required to take the COMPASS exam unless he/she has ACT scores. Students may elect to take COMPASS if they have ACT or SAT scores. Students may retake the COMPASS exam one time. Students with applicable transfer credits are not required to test in that area.

REQUIRED COURSE PLACEMENT

First-time SSC degree-seeking students are required to complete all developmental courses into which they are placed by COMPASS or ACT scores and that are required by their programs, beginning with their first semester of credit enrollment and continuing for all subsequent semesters to completion. Reading proficiency is required of all students as determined by placement or course completion. Exceptions may be made on a case-by-case basis for a student returning after an absence at the discretion of the subject department chair or designee.

TRANSCRIPTING CREDIT FOR PRIOR LEARNING

Credit can be awarded for demonstrated college-level learning. Students applying for credit

1. must provide documentation to support the learning,
2. must have documentation evaluated by the appropriate college personnel, and
3. will have this credit recorded on his or her transcript after the student successfully completes 12 hours at Stark State College, if credit is awarded. Successful completion is defined as a "D" or better.

For more information, contact the Office of Admissions/Student Services.

CREDIT BY EXAMINATION (PROFICIENCY TESTING)

Students who can demonstrate ability and knowledge in a particular subject area may establish credit in certain courses without enrolling in them. This is done by taking a special examination or performing a special assignment, or both, through the appropriate department. An examination fee is assessed. No letter grade is given. Students may take the exam only once per course. Students enrolled in a course are not eligible to take a proficiency examination for the course after being enrolled for 20 calendar days or more for a regular term, and seven days or more for an eight-week term.

ADVANCED PLACEMENT

The College accepts credits earned while in high school as measured by the College Entrance Examination Board's Advanced Placement (AP) program. Students must score three or higher on a subject-area examination. Contact the Office of Admissions/Student Services at 330-494-6170 for additional information.

CLEP CREDIT BY EXAMINATIONS

The College will award comparable academic credit to registered students for successful completion of the College Entrance Examination Board's College Level Examination Program (CLEP) general and subject-area examinations. Contact the Office of Admissions/Student Services at 330-494-6170 for additional information.

EARLY COLLEGE ADMISSION POLICY

Stark State College's early college admission program is designed to provide qualified high school students with access to college-level coursework. College courses taken under the early college admission program also may fulfill high school graduation requirements, if approved by the student's local school district. Two early college admissions programs offered at Stark State are dual enrollment/College Credit Plus and Post-Secondary Education Options.

Participation in the early college admission program at Stark State College is not intended to replace high school coursework, but rather to enhance educational opportunities available to high school students. For additional information, contact the Academic Outreach Office at 330-494-6170 or visit www.starkstate.edu/outreach.

DUAL ENROLLMENT/COLLEGE CREDIT PLUS

High school students from partner high schools may enroll in dual enrollment courses, now also known as College Credit Plus, offered, at the high school, online or at the college. In all cases, they can earn the same transferable college credit. Students must meet the college entrance testing requirements (COMPASS or ACT) and fulfill all prerequisites in order to enroll. They are taught by college-credentialed faculty who use the college textbook, syllabus and learning outcomes. Upon successful completion of the course, the student earns college credit as well as high school credit. For more information visit www.starkstate.edu/dualenrollment.

POST-SECONDARY EDUCATION OPTIONS (PSEO)

Students who attend high schools that are not dual enrollment partners may participate in the PSEO program to enroll in classes on a Stark State College campus. They must notify their high school by March 30 of their intent and be approved by the high school. They must then meet College requirements, including GPA and qualifying ACT or COMPASS test scores. For specific information, visit www.starkstate.edu/pseo.

COLLEGE TECH PREP

In an attempt to ease the transition to college for students in career-technical education, the state of Ohio, through collaboration between the Ohio Board of Regents and the Ohio Department of Education, has divided the state into six regional centers. Stark State College now partners with Kent State University, the University of Akron and Youngstown State University in the newly formed East Central Region.

Through this joint venture, the four post-secondary institutions have come together in a unique partnership with the goal of supporting students, teachers, counselors and administrators. The main purpose of the collaboration is to create meaningful articulation agreements regionally with secondary high schools and career technical planning districts.

As the East Central Regional Center develops, Stark State looks forward to being a valuable partner in assisting northeast Ohio students in accessing earned college credits, increasing the number of college graduates and creating a highly qualified, well-paid workforce in Ohio.

FULL-TIME STUDENT

A full-time student is one who is officially enrolled in Stark State College for a minimum of 12 semester hours of course work in fall or spring semester or six hours in summer semester. (Please note that the definition of a summer full-time student may vary for financial aid purposes.)

PART-TIME STUDENT

A student enrolled in 11 semester hours of coursework or fewer during a fall or spring semester is considered a part-time student. Enrollment of five semester hours or fewer during a summer semester is considered part time.

STUDENT ID CARDS

Identification cards will be mailed to all students who apply to the College when they are accepted. This card also serves as the student's library card. Students are expected to carry ID cards at all times. Loss or theft of an ID card should be reported to the Academic Records/Registrar's Office.

STUDENT RESPONSIBILITY

Students are responsible for being familiar with and adhering to all College Policies and Procedures as published on the College website at www.starkstate.edu/policies. The site is searchable by opening the link marked Complete P & P (pdf), then right-clicking on the document and typing in the search phrase listed above. Students without internet access may use open labs to access www.starkstate.edu/policies. Requests for printed copies of policies and procedures, or questions regarding any policy or procedure, should be directed to the Office of Admissions/Student Services.

STUDENT SERVICES

The Office of Admissions/Student Services provides non-instructional services to students. Stark State College faculty and staff support the philosophy, objectives and goals of the College and out of concern for students and their progress toward educational and occupational goals, the College has organized a program of services and activities to assist our students in making full use of the total educational program.

COUNSELING SERVICES

The advising and student engagement department offers free and confidential counseling services to support students as they pursue their academic goals. Services include individual counseling, seminars, outreach, support groups and referrals to community support agencies. Students are encouraged to make full use of counseling services to assist them in achieving their personal and academic goals.

OFFICE OF MULTICULTURAL STUDENT AFFAIRS

Stark State College provides services to multicultural students to maximize access for educational opportunities and to create a campus environment that is representative of the racial and ethnic diversity in society at large. The goal of this commitment is to assist multicultural students in reaching personal, academic and career goals at Stark State and beyond. The Office of Multicultural Affairs is available to provide

- academic, personal and group advising
- referrals for scholarships, financial assistance, career counseling, tutoring, mentoring and internship programs
- coordination of various services with academic and non-academic Stark State offices

Other support activities include

- coordinating communications between the student services office and the multicultural student community
- liaison between Stark State and various community agencies
- promotion of cultural diversity programs

To schedule an appointment, call the Office of Multicultural Student Affairs at 330-494-6170, Ext. 4274.

DISABILITY SUPPORT SERVICES

Stark State College provides equal access to educational programs and services for all qualified students with disabilities. The Disability Support Services staff assists students by providing academic support services and accommodations, academic advising, admissions and financial aid assistance and career guidance. Handicapped parking by permit is available, as well as accessible restrooms, elevators, electric doors and Braille tactile room signs. The College's Disability Support Services Office coordinates various services with academic and non-academic offices and serves as a liaison between the College community and state and local agencies.

It is recommended that students provide documentation of their disability, test reports and school records to help the Disability Support Services department provide appropriate academic accommodations and support services. Call Disability Support Services at 330-494-6170, Ext. 4935 for information or to schedule an appointment.

E-LEARNING ORIENTATION (WEB-BASED COURSES)

Students enrolling in Web-based courses for the first time are required to complete "Succeeding Online," a required online orientation class, the first time they take a Web 2, 3 or 4 class. More information can be found at www.starkstate.edu/estarkstateorientation.

DIGITAL LIBRARY AND LEARNING RESOURCE CENTER

The Stark State Digital Library, adjacent to the College Atrium, is a collection of digital information, resources, links and services as well as people available to assist students. A librarian provides assistance and computer services to students and classes. Refer to the College Web site for hours and more information. The Learning Resource Center, which houses a collection library and other resources, is located east of the main student parking lot and serves both Stark State College and Kent State University-Stark Campus. Refer to the College Web site for current hours or call 330-499-9600 for library information.

THE TESTING CENTER

The Testing Center in M202 offers both computer-based and pencil-and-paper testing for specific courses. Some courses require students to take computer-based tests in the Testing Center during a timeframe of usually three to four days. This service provides more instructional time in class, as well as an opportunity for students to become familiar with this technology. This arrangement is an advantage for students, since many licensure exams are now computer-based.

STUDENT SUCCESS DIVISION

The Student Success Division provides support programs to assist students in achieving their academic goals at Stark State, including

Educational Counseling
Students who need academic support can receive individual educational counseling in areas such as study skills, test anxiety, time management and other college success skills.

Success Seminars
Each term, strategies for college success are presented to students either in the classroom or through free seminars. Stop by room B230 or view the seminar calendar for more information.

TRiO – Student Support Services (SSS)
The TRiO student support services project is a federally funded program offering a wide variety of support and academic services to qualifying students. Participants are low-income, first generation college students who require academic support. Some of these student also may have disabilities. TRiO provides education and career planning, advising, tutoring and educational counseling.

TRiO – Upward Bound Math and Science (UBMS)
UBMS provides educational and academic support to area high school students to provide them access to Stark State and assist them in learning about going to college. These students spend six weeks during each summer on our campus, taking classes and adapting to the college environment, preparing themselves for entry to college after high school graduation.

TRiO – Focus on African American Males in Education (FAME)
FAME is designed to promote college-going among African American males by strengthening social skills, emotional well-being, and academic achievement through high school and college academic support systems.

STUDENT EMAIL

Stark State College provides email accounts for all students. Access is available from any Web-enabled computer at the College, at home or any other location that has access to the internet and a Web browser. Information and access to the student email site is at http://email.starkstate.net

OPEN LABS AND WIRELESS ACCESS

Several open computer labs are available for student use. Wireless internet access also is available throughout the College.

HELP DESK

The Help Desk provides technical support on systems used at the College. Access the Help Desk from mystarkstate, via phone at Ext. HELP or in person in Room B219.

COMPUTER LAB USAGE GUIDELINES

Use of computing facilities at Stark State College is a privilege. Users are subject to compliance with certain principles designed to assure that all users have reasonable access to facilities. Students and others authorized to use the computer labs must read and agree to the terms of the guidelines prior to using any College computer equipment. The computer lab usage guidelines have been instituted to ensure that the action of any one user will not adversely affect any aspect of the work or computer usage of another.

Abuse of computing privileges is subject to disciplinary action. Disciplinary action may include loss of computing privileges and other disciplinary sanctions up to and including discharge and/or dismissal. An abuser of the College's computing resources may also be liable for civil or criminal prosecution.

Computer lab usage guidelines are available from the Office of Admissions/Student Services, from the staff of any of the computer labs, at www.starkstate.edu and in the Student Handbook.

STUDENT PRIVACY REGULATIONS

The College has implemented the statutory requirements pertaining to the access, inspection, and review of student records in accordance with the Family Education Rights and Privacy Act of 1974.

STUDENT RECORDS

Student records include all official records, files and data directly related to a student who has attended classes at Stark State College. This includes all material that is incorporated into the student's cumulative record folder, which is intended for College use or to be available to parties outside the College, and specifically including, but not necessarily limited to, identifying data, academic work completed, level of achievement (grades, standardized achievement test scores), attendance data, scores on standardized intelligence, aptitude and psychological tests, interest inventory results, health data, family background information, teacher or counselor ratings and observations and verified reports of serious or recurrent behavior patterns.

STUDENT DIRECTORY INFORMATION

A student's directory information includes the following information and may be released without the student's consent: name, home address, college email address, phone number, major, status (including dates of attendance, full-time/part-time, withdrawals, hours enrolled, degrees awarded and honors received, including Phi Theta Kappa, Dean's List, distinction, high distinction, etc.)

Please note that students have the right to withhold the release of directory information. To do so, a student must complete a Request for Non-Disclosure of Directory Information form available on mystarkstate under "personal information" or in the Academic Records/Registrar's Office.

Before placing a "no release" designation on records, students should note

- The College receives many inquiries for directory information from a variety of sources outside the institution including prospective employers, news media, honor societies, and insurance companies. Placing a "no release" designation on your record will preclude release of such information.
- A "no release" designation can apply to all elements or individual elements the student chooses to withhold.

Parents do not have an automatic right to information on the student attending Stark State College, even if the student is legally a minor under the age of 18. Parents do have the right to this information if the student is financially dependent on the parent and the parent can show proof of this by his or her most recent federal income tax return.

STUDENT CONDUCT

When a student enters Stark State College, it is taken for granted by College authorities that an earnest purpose exists, and that the student's conduct will demonstrate that assumption. If, however, the student should be guilty of unbecoming conduct, academic dishonesty, or should neglect academic duties, the College administration will take such action as the particular offense requires. College disciplinary action may include (a) informal reprimand, (b) formal reprimand, (c) administrative probation, (d) a definite period of suspension, (e) an indefinite period of suspension, and (f) expulsion.

STARK STATE COLLEGE STORE

Textbooks, supplies and retail items are available in the College Store, which is open during all hours of registration. Regular store hours are Monday through Thursday, 8 a.m. to 7:30 p.m. and Friday, 8 a.m. to 3:30 p.m., or as posted. The College Store may be accessed online at www.starkstate.edu/collegestore.

For the most current academic and student conduct policies, as well as additional policies and procedures of interest to students, go to ***www.starkstate.edu/policies***. Printed copies may be requested in the Office of Admissions/Student Services.

CAREER DEVELOPMENT

The Career Development Office at Stark State College is dedicated to empowering students and alumni in developing career planning and job search skills, and facilitating mutually beneficial relationships between employers, students and alumni. All students are encouraged to become familiar with the Career Development Office (S100) during their first semester.

The Career Development Office provides

- current information on job search materials and techniques
- information on employers for job search preparation
- information on various careers in the form of workshops, software, DVDs and online career resources

JOB SEARCH ASSISTANCE

The Career Development Office provides assistance on all aspects of the job search. This assistance includes help with resumes, cover letters, interviewing skills and other related topics.

STUDENT AND PART-TIME JOBS

The Career Development Office maintains a job board outside of Room S100 where student and part-time jobs are posted. Notices of job openings are received from area employers and individuals and are available to all interested students. Work Study jobs on campus are processed through the Financial Aid Office.

ONLINE JOB BOARD (COLLEGE CENTRAL NETWORK)

Approved students and alumni are eligible to use the Stark State College online job board after completing a registration process. Once registered, students/graduates will be able to search jobs and email a resume to employers 24 hours a day, seven days a week. Employers will also be able to search resumes and contact candidates directly for job opportunities. All students are encouraged to meet with a career development representative to learn more about College Central Network.

PROFESSIONAL WORK EXPERIENCE

The internship coordinator works with students to help them connect with employers for professional work experience opportunities. Students should have a minimum GPA of 2.0, sophomore standing and have relevant coursework completed in their declared major. This program is designed to help students obtain experience in their field while pursuing an education. Employer needs and requirements may vary. Contact the Career Development Office for more information.

CAREER GUIDANCE PROGRAM

The career guidance program can help those who are

- just entering Stark State College and unsure about career objectives
- disenchanted with present or past career choices
- preparing to make a career transition.

The program will measure aptitudes, interest and values and may be summarized with a counseling session. Visit the Stark State College MyPlan page at www.starkstate.myplan.com to access this career guidance tool. For additional assistance, contact the Career Development Office.

ALUMNI ASSISTANCE

The Career Development Office offers free lifelong services for graduates as well. Graduates may work through the alumni affairs coordinator to learn more about these and other opportunities, such as mentorships.

STUDENT LIFE

The College's goal is to provide the finest intellectual experience in an environment that highlights the fullest individual and social development of each student. All students have the opportunity to participate in student activities such as student government, student clubs and other worthwhile and interesting events.

PHI THETA KAPPA HONOR SOCIETY

Phi Theta Kappa is an international honor society for two-year colleges and is similar in structure and operation to Phi Beta Kappa at four-year institutions. Phi Theta Kappa provides its members with opportunities in the areas of scholarship, leadership, service and fellowship. The society has more than two million members and more than 1,250 chapters worldwide. The Beta Gamma Epsilon chapter of Phi Theta Kappa was established at Stark State College in 1996. To qualify for membership, a student must have a cumulative GPA of 3.75 or higher in at least 16 hours of degree-related courses. To continue membership, a student must maintain a cumulative GPA of 3.40. The initial membership fee provides lifetime membership at the local, regional and international levels. Phi Theta Kappa members are encouraged to participate in honors and service projects at all levels of the society.

KAPPA DELTA PI HONOR SOCIETY IN EDUCATION

Kappa Delta Pi has more than 50,000 members in 550 collegiate and professional chapters in colleges, universities, and communities throughout the United States and around the world. The organization recognizes and promotes excellence in education. The Alpha Delta Kappa chapter of Kappa Delta Pi Honorary Society in Education was established at Stark State College in 2007. Members exhibit outstanding leadership and scholarship in education.

INTERFAITH CAMPUS MINISTRY

Interfaith Campus Ministry was formed in 1967 and serves all persons on the campus – students, faculty and staff – through personal counseling (faith issues, crisis, family, stress, loneliness, communication), support groups and study groups. Interfaith is a link between the campus, religious communities and area resources. Interfaith promotes respect for the dignity of each person and understanding and acceptance of persons of diverse faith, traditions and cultures. Interfaith responds to personal concerns in a confidential atmosphere. Interfaith sponsors the Stark Campus Preschool Child Center, located adjacent to the campus.

CAMPUS PRESCHOOL CENTER

The Stark Campus Preschool Child Center is operated by Interfaith Campus Ministry for students, faculty and staff of Stark State College and the community. Center hours are Monday through Friday, 7 a.m. to 6 p.m. Children may be enrolled by the semester. The center is located at the John Knox Presbyterian Church, 5155 Eastlake N.W., across from the campus. For childcare registration and information, call 330-499-0909.

STUDENT GOVERNMENT

An elected student government plans and coordinates extracurricular programs and social affairs for students. The student government assists the College faculty and administration in making rules and regulations by providing student opinion and advice.

STUDENT ORGANIZATIONS/CLUBS

An important part of student life at Stark State is involvement in student organizations. There's something for everyone at Stark State; just take a look! www.starkstate.edu/content/student-organizations

- American Sign Language Club
- American Society of Mechanical Engineers (ASME)
- Association for Medical Laboratory Technicians (AMLT)
- Beta Beta Beta (Tri Beta) Biological Honor Society
- C3
- Chess Club
- Criminal Justice Student Association
- Cultural Diversity Club
- Enactus
- Engineering Technology Club
- Environmental Club
- Future Speakers of America
- Heads Up
- High Technology Crime Investigation Association (HTCIA)
- Human and Social Services Student Organization
- Institute of Electrical and Electronic Engineers (IEEE)
- Institute of Management Accountants (IMA)
- International Association for Hydrogen Energy
- International Club
- Kappa Delta Pi International Honor Society in Education
- LGBTS Global
- Massage Therapy Club
- Multimedia Group
- Native American Indian Organization
- Phi Theta Kappa Honor Society
- Physics and Astronomy Club
- Respiratory Therapy Club
- Rotaract (Alliance Satellite Center)
- Ski and Snowboarding Club
- Social Science Club
- Society of Manufacturing Engineers (SME)
- Society of Women Engineers (SWE)
- Software Development Guild
- Stark Raving Writers
- Stark Voices – Student Publication/Newspaper
- Stark State College Association of Medical Assistants
- Stark State College Student Chapter of the American Chemical Society
- Student American Dental Hygienist Association (SADHA)
- Student Connection Club
- Student Dietary Association at Stark State College
- Student Government Association/InterClub Council
- Student Health Information Management Association (SHIMA)
- Student Nurse Association (SNA)
- Student Occupational Therapy Assistant Club (SOTA)
- Student Physical Therapist Assistant Club (SPTA)
- Sustainability Student Group
- TOPS (Taking Off Pounds Sensibly)
- Veterans Club at Stark State College
- Women of Color

For the most current academic and student conduct policies, as well as additional policies and procedures of interest to students, go to ***www.starkstate.edu/policies***. Printed copies may be requested in the Office of Admissions/Student Services.

FINANCIAL AID

The Financial Aid Office is staffed with experienced professionals who can assist students in analyzing their particular situations and determining the appropriate avenue for financial assistance. The goal of the financial aid staff is to provide financial assistance to students who otherwise could not afford to attend college. Additional information about financial aid is available at www.starkstate.edu/finaid or in the Financial Aid Office located in S308.

APPLICATION FOR FINANCIAL AID CHECKLIST

Review the following checklist to determine if you have completed all necessary steps for starting classes in the coming semester.

- Apply for Admission - Complete your Stark State College application online at www.startkstate.edu.
- Apply for Financial Aid - All students applying for financial aid must complete the Free Application for Federal Student Aid (FAFSA). Apply via www.fafsa.ed.gov. The Stark State College school code is 011141.
- Apply for Student Loan - If you are interested in a federal student loan, submit a Direct Loan request form.
- Provide Transcripts of Prior Learning - Submit all transcripts including high school and previous college transcripts or, if applicable, submit a copy of your GED certificate or scores.

REQUIRED FORMS AND PRIORITY DATES

Summer Session

March 1	FAFSA filing deadline
April 1	Required documentation deadline
May 1	Loan request deadline

Fall Session

May 1	FAFSA filing deadline
June 1	Required documentation deadline
July 1	Loan request deadline

Spring Session

Oct 1	FAFSA filing deadline
Nov 1	Required documentation deadline
Dec 1	Loan request deadline

LATE APPLICANTS

Applications received after these dates will be considered for aid, but students may not receive funds until after the start of the semester. That means you should be prepared to use your own funds to pay for a portion of your tuition and all of your books before each semester's payment deadline.

FEDERAL AND STATE AID PROGRAMS

The following programs are grants and do not require repayment:

Federal Pell Grant (PELL)
An award of $602 to $5,730 per year, based on financial need. Eligibility is based upon need, enrollment and cost of education. The maximum can change yearly and depends on program funding.

Federal Supplemental Education Opportunity Grant (FSEOG)
Allocation of funds is at the discretion of Stark State. Awarding of funds is based on need and application date. Award amounts vary, up to $400 per year. Apply through the FAFSA. According to federal regulations, students must be Pell-eligible to receive FSEOG funds. You must apply early! Funds are limited and are distributed on a first-come, first-served basis.

Federal Work Study Program (FWSP)
Allows students to be employed at the College to earn money for educational expenses. Awards are based on financial need; submit a written request to the Financial Aid Office. An award does not guarantee earnings; students are paid with a bi-weekly paycheck for hours actually worked.

Military Grants
Branches of the U.S. military offer various financial aid opportunities.

Veterans' Educational Benefits
Stark State College is fully accredited under the laws that provide educational benefits for veterans. The Academic Records/Registrar's Office certifies veterans' eligibility.

Scholarships
Stark State College offers a wide variety of scholarship opportunities for qualified students. Additional information is available at www.starkstate.edu/scholarships.

Social Service Programs
Bureau of Vocational Rehabilitation Educational assistance may be available for students with special needs. Call the Canton (330-438-0500) or Akron (330-643-3080) office for more information.

Workforce Initiative Association (WIA) and Trade Adjustment Assistance (TAA) for individuals who recently lost jobs or are entering the workforce after an extended period of unemployment. You must complete the FAFSA to determine eligibility for grants before being considered for WIA and TAA funding. For information about WIA and TAA, contact the Employment Source at 330-433-9675.

FEDERAL DIRECT LOAN PROGRAMS

A Federal Direct Loan offers freshman students up to $5,500 and sophomores up to $6,500 per year. Students pursuing a one-year certificate will remain at freshman level for borrowing purposes. This is a loan and must be repaid. Interest rates vary annually. If you already have a Direct Loan, borrowing a new loan will not affect the rate or terms of your previous loan(s). You may qualify for a subsidized and/or an unsubsidized Direct Loan up to the amounts listed above.

Subsidized Direct Loans These loans are based on financial need, therefore some students may not qualify. With a subsidized Direct Loan, no interest accumulates and no repayment is required as long as the student is enrolled in college at least half time.

Unsubsidized Direct Loans Students who do not qualify for a subsidized Direct Loan may borrow up to the maximum amounts designated on the award notification through an unsubsidized Direct Loan. Loan payments can be deferred as long as the student is enrolled at least half time. Interest will accrue and can be paid by the borrower while in school and during the grace and repayment period. Independent students have the option of borrowing an additional $4,000 in unsubsidized loans.

Federal Parent Loan for Undergraduate Students (Federal PLUS) The Federal PLUS program is for parents of dependent students. It is a loan in which family income is not taken into consideration; therefore, the program is open to almost any parent who has good credit. The parent can borrow up to the cost of the college education, less aid, at a variable rate of interest (currently not to exceed 9%). Repayment begins 60 days after the final disbursement of the funds, according to the terms negotiated by the bank. We recommend students first utilize all eligibility for grants and the Federal Direct Loans before receiving a federal PLUS. This is a loan and must be repaid. Funds are made in multiple disbursements and given to the parent(s) after tuition and fees have been paid.

Effective Fall 2012

STANDARDS OF ACADEMIC PROGRESS

Standards of Academic Progress (SAP) is a series of standards required to maintain eligibility for federal student aid. Requirements include components of completion of credit hours, grade point average (GPA), and maximum time frame as defined below. Students who do not meet these requirements will be disqualified from future financial aid.

SAP requirements
Stark State College requires that any student who applies for or receives federal financial aid makes satisfactory academic progress toward an Ohio Board of Regents (OBR) approved degree or certificate.

Satisfactory academic progress is measured as:

- Overall grade point average of 2.0
- Completion of 67% of the cumulative attempted credit hours, including hours of repeated coursework
- Completion of OBR approved degree or certificate within the number of required credit hours listed in the college catalog for the associate or certificate degree multiplied by 150%, as determined by the Financial Aid Office and includes accepted transfer credit hours and up to 30 attempted credit hours of required developmental coursework.

Successful grade completions are: A, B, C, UC, D, UD, CR
Unsuccessful grade completions are: F, W, IN, NC, NA

Failure to meet these measurements will result in the loss of federal financial aid.

Monitoring Progress
At the end of each term attended, a student's academic progress will be evaluated, based upon the standards listed above. If he or she fails to meet any of the above requirements, he or she will receive a notification letter from the college.

After the first term in which the requirements are not met, a student will be placed on financial aid warning for one subsequent term. During the warning period, the student will continue to be eligible for federal financial aid. The College encourages the student to meet with an academic advisor to assist the student with his or her educational goals.

After the second term in which the requirements are not met, a student will become ineligible for federal financial aid. In order to regain federal financial aid eligibility, a student will be required to pay for his or her classes out of pocket until he or she is able to reach the 67% completion rate and a cumulative 2.0 GPA.

Appeal Process
If a student has unusual or mitigating circumstances, he or she may submit an appeal requesting to continue to receive federal financial aid. Mitigating circumstances must be documented and approved by the Standards of Academic Progress Appeal Committee, made up of a financial aid representative, academic affairs representative, and student services representative. The appeal must be submitted by the last day to register in the term in which a student is applying for continued federal financial aid. A student may only submit two appeals during his or her time at Stark State College. Rare exceptions will be made to this policy.

If federal financial aid is reinstated as a result of the appeals process, a student is placed on probation for one term. During the probationary period, a student must complete all registered courses and achieve a 2.0 grade point average for each semester of the probationary period to remain eligible to receive federal financial aid. After one semester of meeting the probation requirements, the student will be placed on an academic plan and must continue to complete all registered courses and maintain a term 2.0 GPA. As long as a student is meeting the requirements of the academic plan, he or she will continue to receive aid. Once a student is at a 67% completion rate for all attempted courses and a 2.0 grade point average, he or she will go back to good standing.

Appeal Procedure

STEP ONE
A student must complete the Standards of Academic Progress Appeal form and submit it to the Financial Aid Office along with an explanation and documentation of the reasons for failing to comply with the stated academic standards. The explanation must include what improvements a student has made that will ensure future academic success.

STEP TWO
The Standards of Academic Progress Appeal Committee, comprised of a financial aid representative, academic affairs representative, and student services representative, will review the appeal and render a decision.

STEP THREE
A student will receive the written decision of the Academic Progress Appeal Committee within ten business days of the committee meeting. **The decision of the Standards of Academic Progress Appeal Committee is FINAL.**

The committee reserves the right to establish parameters as part of the approval process. This includes, but is not limited to, restrictions of credit hours or specific courses, mandatory advising, or adherence to an academic plan.

If a student is approved for financial aid, he or she is encouraged to seek an academic advisor to review an academic plan.

TUITION, FEES, METHODS OF PAYMENT, REFUNDS AND RESIDENCY REQUIREMENTS

Stark State College is committed to providing an excellent college education at an affordable cost to students. The College Board of Trustees, administration, staff and faculty work diligently to control costs and maintain efficiency of the College's operations.

The Board of Trustees of Stark State College reserves the right to revise the current schedule of tuition and fees at any time and without prior notice.

The tuition schedule for the 2014-2015 academic year is listed below and can be found online at www.starkstate.edu/tuition

Tuition and Fees 2014-15*

Effective summer 2014

TUITION*

Tuition includes instructional and general fees

Credit hours	Total tuition (Ohio residents)
1	153.60
2	307.20
3	460.80
4	614.40
5	768.00
6	921.60
7	1,075.20
8	1,228.80
9	1,382.40
10	1,536.00
11	1,689.60
12	1,843.20
13	1,996.80
14	2,150.40
15	2,304.00
16 or more	In-state students add an additional $153.60/cr hr

**Out-of-state residents add $91.00/cr hr to totals*

FEES

View fee descriptions at www.starkstate.edu/tuition

REQUIRED FEES

Processing fee (one-time charge only) 85.00
Maintenance and campus security fee 30.00/sem
(per individual semester, 4 or more credit hours)

OTHER FEES (optional per student need)

Background check fee 30.00
Credit by examination fee..... 76.80/cr hr
Locker fee 4.50/sem
Student installment fee 20.00
(Avoid installment fee by paying your bill in full by cash, check or credit/debit card. For information go to www.starkstate.edu/sipp.)

PROGRAM/COURSE FEES

Some programs and/or courses require special fees www.starkstate.edu/tuition

Stark State College reserves the right to revise the schedule of fees at any time without prior notice. Books, drawing instruments and other supplies are in addition to tuition fees.

Printed copies of the current schedule of tuition and fees may be requested from

- Office of Admissions/Student Services
- Academic Records/Registrar's Office
- Business Office
- Cashier's Office
- Financial Aid Office

FEES DESCRIPTIONS

Processing Fee
The processing fee covers the cost of applying to the College, student assessment, creation of a permanent student record and entering student information into the College's record-keeping system. The processing fee is a one-time fee payable upon first registration.

Maintenance and Campus Security Fee
This fee helps cover the costs of maintaining the College's buildings, grounds and security.

Instructional Fee (included in tuition)
The instructional fee supplements other sources of income to cover the cost of instruction and general operating expenses.

General Fee (included in tuition)
The general fee supplements state subsidies for general institutional services. A portion of this fee is designated to support technology and facilities.

Out-Of-State Residents Tuition Surcharge
A tuition surcharge is assessed out-of-state students, in addition to the per credit hour in-state tuition.

Selective Service Fee
A surcharge is assessed for any eligible male student who has not provided his selective service number to the College. This surcharge is equal to the current Out-of-State Residents Tuition Surcharge.

Locker Fee
A limited number of lockers are available for student use, for a rental fee.

Student Installment Payment Plan Fee (SIPP)
Students electing to use the student installment plan to pay tuition and fees will be required to pay a non-refundable fee for the service.

Credit By Examination Fee
A student who can demonstrate ability and knowledge in a particular subject area may establish credit in certain courses without enrolling in them. This is done by taking a special examination or performing a special assignment, or both, through the subject department chair. An examination fee is assessed.

Background Check Fee
For those who need to obtain some of their educational training off campus at a hospital, day care center or other business, a background check(s) may be required. A fee is assessed to cover the cost of processing the background check.

Culinary Fee
The culinary fee is a fee established per course to cover the cost of consumable goods required for the specific course. Fees may vary by course.

Dental Hygiene Facility Fee
The dental hygiene facility fee supplements sources of income to cover the costs of dental hygiene instruction. The fee is charged each semester and is limited to dental hygiene students

Respiratory Care Technology Fee
The respiratory care technology fee covers the cost of enhanced certification preparation for credentialing exams and certifications, as well as the cost of clinical simulation in the practicum course. Fees may vary by course.

Welding Fee
The welding fee supplements the purchase of equipment, consumables and supplies for welding instruction. Fees may vary by course.

Dietetic Technology Fee
The dietetic technology fee covers the cost of food materials and preparation methods for the specified course. Fees may vary by course.

Commercial Driver's License Fee
The CDL fee covers the cost of all behind-the-wheel training, which will also include the student's Department of Transportation physical, drug screen, and state fees for one Class A CDL driving test. If the student does not pass the CDL test, the fee will cover the equipment for one re-test, but the student must pay for the state test fee.

Law Enforcement Academy Fee
The Law Enforcement Academy fee covers expenses for delivering academy courses.

METHODS OF PAYMENT

Payment of Fees
Payment of tuition and fees may be made in full, at the cashier's window, online, by mail or deposited in the payment drop box on the third floor of the Student Services Building. Fees may be paid with cash, check, money order, debit card, Visa/MasterCard/Discover.

Student Installment Payment Plan (SIPP)
Payment of tuition and fees may be made using the Student Installment Payment Plan (SIPP). A small, non-refundable fee is charged for this service.

Senior Citizens Waiver
Citizens who are 60 years of age or older and have paid the current processing fee may audit credit courses tuition-free on a space-available basis. All other fees are due when incurred.

Senior citizens will receive a 15% discount on course fees for non-credit continuing education courses by presenting their Golden Buckeye Cards at the time of registration. This discount applies to in-person registrations only and does not include special senior citizens classes or company-paid registrations.

REFUNDS

Refund Schedule
Students who wish to withdraw from courses in which they are enrolled and which are being conducted in accordance with the class schedule must complete academic withdrawal procedures to qualify for a refund.

The following regulations apply to refunds:

Full refunds are given to students who enroll in classes that are cancelled by the College. Full refunds are given to students if the College does not permit the student to enroll or continue in coursework. Fee refunds are automatic, and students are not required to complete academic withdrawal procedures.

Instructional fees, general fees, and tuition surcharge fees paid for 16-week semester courses are subject to refund to students who officially withdraw for valid reasons at the following rates

a) Before the seventh day of the semester - 100% refund
b) On the seventh through the ninth day of the semester - 80% refund
c) On the 10th through the 16th day of the semester - 60% refund
d) On the 17th through the 20th day of the semester - 40% refund
e) On the 21st day of the semester and beyond - no refund

Instructional fees, general fees, and tuition surcharge fees paid for 10-week semester courses are subject to refund to students who officially withdraw for valid reasons at the following rates

a) Before the seventh day of the semester - 100% refund
b) On the seventh through the 11th day of the semester - 60% refund
c) On the 12th through the 13th day of the semester - 40% refund
d) On the 14th day of the semester and beyond - no refund

Instructional fees, general fees, and tuition surcharge fees paid for 8-week semester courses are subject to refund to students who officially withdraw for valid reasons at the following rates

a) Before the seventh day of the semester - 100% refund
b) On the seventh through the eighth day of the semester - 60% refund
c) On the ninth through the 10th day of the semester - 40% refund
d) On the 11th day of the semester and beyond - no refund

Instructional fees, general fees, and tuition surcharge fees paid for 5-week semester courses are subject to refund to students who officially withdraw for valid reasons at the following rates

a) Before the seventh day of the semester - 100% refund
b) On the seventh day of the semester and beyond - no refund

The first day of the semester is defined as the official starting date of the semester or portion of the semester. Days of the semester will be counted as any Monday through Friday that classes are in session. Weeks of the semester will be counted as starting on the first day of the semester and every week thereafter. Holidays, Saturdays and Sundays will not be included as days of the term for those refund sections counting days. Holidays, Saturdays and Sundays will be included as days of the term for those refund sections counting weeks. For those classes meeting only once a week on Friday, Saturday or Sunday, the 100% refund period will extend through the Tuesday after the first scheduled class or through the sixth day of the semester, whichever is later.

The Business Office will audit each registration. If fees are paid under mistake of law or fact, appropriate charges or refunds will be made. All refunds will be made within 30 days of withdrawal or schedule change.

Financial Aid Issues in Cases of Withdrawal or Non-Attendance
Students must maintain attendance in their scheduled classes to remain eligible for financial aid funds. Students who fail to maintain attendance in classes, who withdraw or are dismissed before 60% of the term has passed, will have all or a portion of their federal aid eligibility rescinded. This will likely result in monies needing to be repaid to the College and/or the U.S. Department of Education. Students who receive federal financial aid and do not attend classes will be dropped from their classes and have their financial aid cancelled or reduced. The federal government mandates that federal monies for non-attendees who receive federal financial aid be returned to the federal government. Attendance also will be documented at the end of each semester to verify the last day attended in each class.

Medical Refunds
In the event of a severe or life threatening medical condition to the student or an immediate family member, a student may appeal for consideration above and beyond the normal refund policy. Such appeals must be made in writing no later than 30 days after the end of the semester and fully explain the circumstances involved and specify the consideration desired. The appeal must be accompanied by a signed physician's letter explaining the medical condition. Verbal or incomplete requests will be refunded according to the normal refund policy. All appeals will be reviewed within 30 days of receipt, and students will be notified of the determination in writing. Documentation should be provided to the Bursar's Office.

STARK STATE COLLEGE RESIDENCY REQUIREMENTS

Payment of non-resident tuition surcharge is required of any student who does not qualify as a permanent resident of Ohio, as defined by the Ohio Revised Code, section 3333-1-10: Ohio Student Residency for State Subsidy and Tuition Surcharge Purposes.

Intent, Authority and Definitions

It is the intent of the Ohio Board of Regents in promulgating this rule to exclude from treatment as residents, as that term is applied here, those persons who are present in the state of Ohio primarily for the purpose of receiving the benefit of a state-supported education while insuring that the same benefit is conferred on all bona fide domiciliaries of this state whose permanent residence and legal citizenship is in Ohio, and whose actual source of financial support is subject to Ohio taxation. This rule is adopted pursuant to Chapter 119 of the Revised Code, and under the authority conferred upon the Ohio Board of Regents by Section 3333.31 of the Ohio Revised Code.

For purposes of this rule, a "Resident of Ohio for all other legal purposes" shall mean any person who maintains a 12-month place or places of residence in Ohio, who is qualified as a resident to vote in Ohio and receive state welfare benefits, and who may be subjected to tax liability under Section 5747.02 of the Ohio Revised Code; provided such person has not within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.

The dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time self-sustaining employment and established domicile in the state of Ohio for reasons other than gaining the benefit of favorable tuition rates, shall be entitled to in-state residency.

"Financial support" as used in this rule, shall not include grants, scholarships and awards from persons or entities which are not related to the recipient.

An "institution of higher education" as used in this rule shall mean any university, community college, technical institute or college, general and technical college, medical college or private medical or dental college that receives a direct subsidy from the State of Ohio.

General Residency for Subsidy and Tuition Surcharge Purposes

The following persons shall be classified as residents of the state of Ohio for subsidy and tuition surcharge purposes:

1. Dependent students, at least one of whose parents or legal guardian has been a resident of the state of Ohio for all other legal purposes for 12 consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.
2. Persons who have resided in Ohio for all other legal purposes for at least 12 consecutive months immediately preceding their enrollment in an institution of higher education and who are not receiving, and have not directly or indirectly received in the preceding twelve consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.
3. Persons who are living and are gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who are pursuing a part-time program of instruction at an institution of higher education. Under the state's new Forever Buckeyes program the in-state resident tuition rate applies to any Ohio high school graduate who returns to the state to enroll in an Ohio college and establishes Ohio residency.

Specific Exceptions and Circumstances

1. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.
2. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.
3. Section 3345.32 of the Ohio Revised Code requires that male students who are Ohio residents, and must register for selective service, verify that they have registered with the selective service in order to be considered in-state residents to attend Ohio public colleges and universities.
4. Any alien holding an immigration visa or classified as a political refugee shall be considered a resident of the state of Ohio for state subsidy and tuition surcharge purposes in the same manner as any other student.
5. No person holding a student or other temporary visa shall be eligible for Ohio residency for these purposes.
6. A dependent person classified as a resident of Ohio for these purposes shall continue to be considered a resident during continuous full-time enrollment, and until his or her completion of any one academic degree program.
7. In determining residency of a dependent student, removal of the student's parents or legal guardian from Ohio shall not, during a period of 12 months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph (C) (1) of this rule.
8. Any person once classified as a non-resident, upon the completion of 12 consecutive months of residency in Ohio for all other legal purposes, must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding 12 consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident. Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of information regarding the source of a student's actual financial support to that end.
9. Any reclassification of a person who was once classified as a non-resident for these purposes shall have prospective application only from the date of such reclassification.
10. A person who is transferred by his employer beyond the territorial limits of the 50 states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.
11. A person who has been employed as a migrant worker in the state of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.

ACADEMIC POLICIES AND PROCEDURES

Academic policies and procedures are designed to assist Stark State students in achieving academic success. The governance of the College routinely reviews policies and procedures to support student success and to promote the academic quality of our College.

All current and official policies and procedures are maintained on the Stark State College Web site at www.starkstate.edu/policies at all times, including but not exclusive to

Academic Forgiveness
Academic Honors
Academic Probation and Dismissal
Academic Regulations
Affirmative Action Policy
Appeals
Attendance
Audits
College Computing Resources
Concealed Weapons
Computer Usage
Course Substitution
Credit by Proficiency Exam
Credit Residency Requirements
Cross Registration
Dean's List
Early Alert
Grievance Procedures
Grade Appeals
Grading System
Graduation Requirements
Honesty in Learning
Incomplete
Late Registration
Non-Discrimination Policy
President's List
Probation
Smoking/Smokeless Tobacco Use
Standards of Academic Progress (SAP)
Student Records
Transcripts
Transfer Credit
Withdrawal

The site is searchable at www.starkstate.edu/policies by opening the link marked Complete P & P (pdf), then right-clicking on the document and typing in the search phrase listed above. Students are responsible for being familiar with and adhering to College policies and procedures. Students without Internet access may use open labs to access www.starkstate.edu/policies. Requests for printed copies of policies and procedures, or questions regarding any policy or procedure, should be directed to the Office of Admissions/Student Services at 330-494-6170.

COLLEGE COMMITMENT TO SCHOLASTIC HONESTY, STUDENT INTEGRITY AND HONESTY IN LEARNING

Student integrity and scholastic honesty are an integral part of the College's scholastic standard, academic quality and a foundation for our society. Faculty, staff and students are responsible for promoting honesty in learning. Students are responsible for reading and following the Honesty in Learning Policy available at www.starkstate.edu/policies. Any student who violates or assists another to violate the Honesty in Learning Policy will be penalized.

HONESTY IN LEARNING

Stark State College supports honesty in learning as an institutional value; therefore, dishonesty – such as cheating, plagiarism, or furnishing false information to the College or its staff – will subject a student to disciplinary action, which may include dismissal from the College. Faculty, staff and students are responsible for promoting honesty in learning. Students are responsible for being familiar with the policy located in the Student Handbook. Any student who violates or assists another to violate the Honesty in Learning Policy will be penalized.

- Plagiarism – According to the Council of Writing Program Administrators, "In an instructional setting, plagiarism occurs when a writer deliberately uses someone else's language, ideas, or other original (not common-knowledge) material without acknowledging its source."
- Coursework – Work done for class, which a student submits as the student's own work, will not contain that which has been obtained from another, other than properly credited references, sources, and citations. The work which a student submits will be prepared in accordance with course guidelines.
- Exams – Work done on a test, exam, or quiz will be the student's own and will not contain that which has been obtained from an inappropriate source. A student will not obtain nor seek to obtain advanced access to questions or advance copies of a test, exam or quiz without the instructor's permission.

Procedures regarding violations of the Honesty in Learning Policy are contained in the Policies and Procedures Manual.

For the most current academic and student conduct policies, as well as additional policies and procedures of interest to students, go to ***www.starkstate.edu/policies***. Printed copies may be requested in the Office of Admissions/Student Services.

STATE OF OHIO POLICY FOR INSTITUTIONAL TRANSFER

OHIO TRANSFER POLICY

Transfer students shall be subject to the catalog in force at the time of their admission to the receiving institution and to any revisions that occur after its publication and prior to their enrollment. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as native students. Furthermore, transfer students shall be accorded the same class standing and other privileges (e.g., financial aid, housing, registration, parking privileges, etc.) as native students on the basis of the number of credits earned. For more information about credit transfer: www.regents.ohio.gov/transfer.

TRANSFER ASSURANCE GUIDELINES (TAGs)

Students are guaranteed the transfer of applicable credits among Ohio's public colleges and universities and equitable treatment in the application of credits to admissions and degree requirements. Students can complete specific general education courses anywhere in the public system as well as many courses in the degree/major that have been pre-identified for transfer. For more information about TAGs available through Stark State: www.starkstate.edu/tags.

Transferology

Transferology is an online tool that helps students view program requirements, course equivalencies, and see how courses transfer to another college or university. To get access to all that Transferology has to offer: www.transferology.com/welcome.htm

AA/AS DEGREES

Stark State's associate of arts and associate of science degrees are the first step to a bachelor's degree, providing a foundation in general education with special emphasis on the baccalaureate degree students plan to pursue. These transfer degrees are intended as an affordable, transferable beginning to a four-year degree. Students should talk with their academic advisor for more information.

TRANSFER MODULE

Another option for students is the transfer module, which guarantees the transfer of a minimum of 36-40 semester credit hours of specified courses in English, mathematics, arts and humanities, social sciences, and natural and physical sciences from Stark State to any Ohio public college or university and vice versa. For more information about Stark State's transfer module: www.starkstate.edu/transfermodule.

TRANSFER MODULE COURSES

English and Communications	
Effective Speaking	COM121
Interpersonal Communications	COM122
College Composition	ENG124
Technical Report Writing	ENG221
Business Communication	ENG230
College Composition II	ENG231
Mathematics	
College Algebra	MTH125, MTH125A, MTH125B
Precalculus	MTH135, MTH135A and MTH135B
Trigonometry	MTH130
Concepts of Calculus	MTH221
Statistics	MTH 124, MTH124A and MTH124B
Analytic Geometry and Calculus I	MTH 223, MTH223A and MTH223B
Analytical Geometry and Calculus II	MTH224
Analytical Geometry and Calculus III	MTH225
Linear Algebra	MTH226
Ordinary Differential Equations	MTH227
Arts and Humanities	
British Literature: Medieval to 1785	ENG 233
British Literature: 1785 to Present	ENG 234
American Literature: Colonial to 1865	ENG 236
American Literature: 1865 to Present	ENG 237
Ancient and Medieval Art +	ARTH22006
Art History II	ARTH22007
US History I: To 1877	HIS 121
US History II: From 1877	HIS 122
World Civilization: to 17th Century	HIS221
World Civilization: from 17th Century	HIS222
Ethics	PHL122
Understanding Architecture +	ARCH10001
Art Survey +	ARTH12001
Art History I: Ancient and Medieval Art	
Art History II: Renaissance to Modern Art+	ARTH22007
Intro to Shakespeare +	ENG21054
Great Books I +	ENG22071
Great Books II+	ENG22072
Major Modern Writers: British and U.S. +	ENG22073
History of Civilization I +	HIST11050
History of Civilization II +	HIST11051
History of the U.S.: The Formative Period +	HIST12070
History of the U.S.: The Modern Period + `	ST12071
The Understanding of Music +	MUS22111
Music as a World Phenomenon+	MUS22121
Interpreting the Black Experience I +	PAS23001
Interpreting the Black Experience II +	PAS23002
Social Science	
General Psychology	PSY121
Psychology of Adjustment	PSY122
Human Growth and Development	PSY123
Industrial/Organizational Psychology	PSY124
Social Psychology	PSY220
Abnormal Psychology	PSY221
Political Science	PSC121
Basic Economics	BUS122
Microeconomics	BUS221
Macroeconomics	BUS222
Sociology	SOC121
Society and Technology	SOC122
Dynamics of the Family	SOC123
Cultural Diversity	SOC225
Natural and Physical Science	
Introduction to Anatomy & Physiology	BIO101
Anatomy and Physiology I	BIO121
Anatomy and Physiology II	BIO122
Science, Energy and the Environment	BIO126
Human Biology	BIO127
Climate Studies	BIO128
Meteorology	BIO129
Ocean Studies	BIO130
General Biology I	BIO141
Principles of Microbiology	BIO221
General Genetics	BIO241
Introduction to Chemistry	CHM101
General, Organic and Biological Chemistry I	CHM121, CHM121A and CHM121B
General, Organic and Biological Chemistry II	CHM122
General Chemistry I	CHM141, CHM141A and CHM141B
General Chemistry II	CHM142
Organic Chemistry I	CHM241
Organic Chemistry II	CHM242
Physical Geology	GEO141
Principles of Physics	PHY101
Physics I	PHY121, PHY121A and PHY121B
Physics II	PHY122
Astronomy	PHY125

+ Indicates courses offered at Kent State - Stark campus
For the Transfer Module in chart form, www.starkstate.edu/transfermodule

Drug Free Schools and Communities Act Amendments of 1989 Policy

ALCOHOL

Effects of Occasional and Extended Use
Impotence and infertility; high blood pressure; heart attacks; strokes;

cirrhosis of the liver; cancer of the liver, stomach, esophagus or larynx; stomach ulcers; colitis; fetal alcohol syndrome; premature aging; birth defects; slowed reaction; slurred speech; unconsciousness.

Criminal Sanctions/Penalties
- Purchase under 21: Maximum fine of $1,000
- Possess or consume under 21: Maximum fine of $100
- Open container violation: Maximum fine of $1,000
- Consumption in a motor vehicle: Maximum confinement of 30 days.

MARIJUANA

Effects of Occasional and Extended Use
Chronic lung cancer, brain damage, high blood pressure, diminished immunity, premature aging, impairment of memory, diminished motor skills, birth defects, fetal alcohol syndrome, mood swings, loss of ambition, increased apathy, decline in school and work performance.

Criminal Sanctions/Penalties
- Unlawful possession of use: Maximum penalties, depending on amount, may result in fine of $5,000 and/or maximum confinement of 10 years.
- Sell, offer to sell, or distribute for sale: Maximum fine of $7,500 and/or maximum confinement of 25 years.

NARCOTICS: COCAINE, CRACK COCAINE

Effects of Occasional and Extended Use
Seizures, stroke, cardiac or respiratory arrest, convulsions, delirium and paranoia, insomnia, anxiety, irritability, nasal problems, powerful addiction, disorientation.

Criminal Sanctions/Penalties
- Possession or use: Ranges from rehabilitation programs to substantial years of confinement and fines.
- Sell, offer to sell, and distribute for sale: Penalty determined by the amount of substance, with fines in large amounts (exceeding $1,000,000) and life imprisonment.

NARCOTICS: HEROIN, OPIUM, MORPHINE

Effects of Occasional and Extended Use
Cardiac arrest, vein inflammation, insomnia, serum hepatitis, convulsions, skin abscesses, death, physical dependence, difficulty breathing, nausea, constricted pupils, panic.

Criminal Sanctions/Penalties
- Possession or use: Ranges from rehabilitation programs to substantial years of confinement and fines.
- Sell, offer to sell, and distribute for sale; Penalty determined by the amount of substance, with fines in large amounts (exceeding $1,000,000) and life imprisonment.

NARCOTICS: OTHER CONTROLLED SUBSTANCES (LSD, PCP)

Effects of Occasional and Extended Use
Hallucinations, distortion of senses, memory loss, disruption of motor skills, permanent cognitive damage, bizarre behavior, severe disorientation.

Criminal Sanctions/Penalties
- Possession or use: Ranges from rehabilitation programs to substantial years of confinement and fines.
- Sell, offer to sell, and distribute for sale; Penalty determined by the amount of substance, with fines in large amounts (exceeding $1,000,000) and life imprisonment.

NARCOTICS: DEPRESSANTS (BARBITURATES AND TRANQUILIZERS)

Effects of Occasional and Extended Use
Death, coma, altered perception, physical dependence, dangerous withdrawal symptoms, staggered walk, difficulty breathing, slurred speech, psychological dependence.

Criminal Sanctions/Penalties
- Possession or use: Ranges from rehabilitation programs to substantial years of confinement and fines.
- Sell, offer to sell, and distribute for sale; Penalty determined by the amount of substance, with fines in large amounts (exceeding $1,000,000) and life imprisonment

Note: Distribution of controlled substances in or near schools and colleges can result in penalties twice the regular for the same offense. Trafficking in drugs can result in forfeiture of property including motor vehicles, vessels, money, real property and other personal property.

COLLEGE SANCTIONS

Students – The unlawful use, possession, sale, manufacture, or distribution of drugs and alcohol subjects any student discipline pursuant to established College procedures and to sanctions up to and including suspension or dismissal from the College. Any student violating this policy or otherwise engaging in illegal conduct will also be referred for criminal prosecution.

College employees – Under the influence, possession, or use, furnishing to a minor: Sanctions up to and including termination. Any employee engaging in the illegal use, possession, sale, manufacture, or distribution of drugs and alcohol will be subject to disciplinary procedures outlined in the Policy and Procedure Manual with sanctions up to and including termination from the College.

SUPPORT AND RESOURCES

Twelve Step programs are self-help groups based on the spiritual concepts of Alcoholics Anonymous. They are often used as inpatient and outpatient treatment aftercare.

Some Twelve Step Programs available
- Adult Children of Alcoholics
- Alcoholics Anonymous
- Co-dependency Anonymous
- Cocaine Anonymous
- Narcotics Anonymous
- Overeater Anonymous

These local information and referral agencies can give you information about assessment, treatment and support resources:

- Alcohol and Drug Assistance - 330-453-8811
- Crisis Intervention Center - 330-452-6000 or 1-800-956-6630
- Stark State College Office of Admissions/Student Services
- Stark State College Security Department
- Interfaith Campus Ministry
- Stark State College counseling services -330-494-6170, Ext. 4219
- Quest Recovery and Prevention Services - 330-453-8252

SSC CONCEALED WEAPONS POLICY

The use, possession or carrying of a handgun or other weapon by any person who is not a professional law enforcement officer on College property is prohibited and in violation of state law.

BUSINESS AND ENTREPRENEURIAL STUDIES

In an effort to meet the needs of students, courses required in each of the programs are scheduled in sequence to accommodate those attending on a full-time or part-time basis. All students should consult their academic advisors to plan their schedules and course sequence appropriately. In order to keep pace with progress, the College reserves the right to change fees, academic programs, course descriptions, or any other statements, contained in this catalog at the discretion of the College or its Board of Trustees.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2001

ACCOUNTING – CORPORATE MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	4	ACC221	
ACC223	Cost Accounting	4	ACC127 **and** ACC133	
ACC225 **or** ACC 237	Auditing+++ **or** Fraud Examination+++	4	ACC222 (pre/co-req) ACC133	
ACC228	Business Taxation	4	ACC132	
TECHNICAL ELECTIVES: ***Must select two courses***				
ACC226	Advanced Accounting	4	ACC222 (pre/co-req)	
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)	
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)	
ACC234	Advanced Payroll	3	ACC227	
ACC235	Forensic Accounting	3		
ACC238	Financial Statement Analysis	4	ACC133	
ACC240	CMA Exam Part 1 Review Course	4	ACC223 (pre/co-req)	
ACC241	CMA Exam Part 2 Review Course	4	ACC223 (pre/co-req)	
BTD223	Business Co-op	3	*Department Chair Approval*	
	Total	**34-36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC127	Quantitative Business Statistics	4	BUS124	
ACC130	Business Law & Ethics	3		
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
BUS 221	Microeconomics^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
FIN220	Business Finance	4	ACC133	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**38**		
	TOTAL CREDIT HOURS	**72-74**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
+++Course should be chosen following consultation with academic advisor.
BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
Ω MTH125 Statistics or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Arts & Humanities Elective: HIS121, HIS122, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, PHL122 or SOC225

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ACCOUNTING – CORPORATE MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
BUS121	Business Administration^	4	IDS102 **or** Proficiency
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
ACC130	Business Law & Ethics	3	
		18	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC127	Quantitative Business Statistics	4	BUS124
COM121	Effective Speaking	3	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
		17	
Third Semester			
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
ACC228	Business Taxation	4	ACC132
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
Technical Elective[2]		3-4	
		18	
Fourth Semester			
ACC223	Cost Accounting	4	ACC127 **and** ACC133
ACC222	Intermediate Accounting II	4	ACC221
ACC225	Auditing+++	4	ACC222(pre/co-req)
or	**or**		**or**
ACC237	Fraud Examination+++		ACC133
FIN220	Business Finance	4	ACC133
Technical Elective[2]		3-4	
		19	
	TOTAL CREDITS	**72-74**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

+++Course should be chosen following consultation with academic advisor.

BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

Ω MTH125 Statistics or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

[1] Arts & Humanities Elective: HIS121, HIS122, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, PHL122 or SOC225

[2] Technical Electives: ACC226, ACC227, ACC229, ACC234, ACC235, ACC238, ACC240, ACC241, BTD223

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2002

ACCOUNTING – CPA MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC124	Individual Taxation	4	ACC132 (pre/co-req)	
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	4	ACC221	
ACC223	Cost Accounting	4	ACC127 **and** ACC133	
ACC225	Auditing	4	ACC222 (pre/co-req)	
TECHNICAL ELECTIVE: ***7 credit hours minimum***				
ACC226	Advanced Accounting	4	ACC222 (pre/co-req)	
ACC228	Business Taxation	4	ACC132	
ACC232	Governmental & Not-for-Profit Accounting	4	ACC132	
ACC239	Estate & Income Tax Planning	4	ACC124	
BTD223	Business Co-op	3	*Department Chair Approval*	
	Total	**35-36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC127	Quantitative Business Statistics	4	BUS124	
ACC130	Business Law & Ethics	3		
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
BUS 221	Microeconomics^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
FIN220	Business Finance	4	ACC133	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**38**		
	TOTAL CREDIT HOURS	**73-74**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better.
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241
(All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ACCOUNTING – CPA MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS121	Business Administration^	4	IDS102 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ACC130	Business Law & Ethics	3	
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
		18	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC127	Quantitative Business Statistics	4	BUS124
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
COM121	Effective Speaking	3	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
		17	
Third Semester			
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
ACC124	Individual Taxation	4	ACC132 (pre/co-req)
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
Technical Elective[2]		4	
		19	
Fourth Semester			
ACC222	Intermediate Accounting II	4	ACC221
ACC223	Cost Accounting	4	ACC127 **and** ACC133
ACC225	Auditing	4	ACC222 (pre/co-req)
FIN220	Business Finance	4	ACC133
Technical Elective[2]		3-4	
		19-20	
	TOTAL CREDITS	**73-74**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better.

++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

[2] Technical Elective: ACC226, ACC228, ACC232, ACC239, BTD223

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ONE-YEAR CERTIFICATE

2004

BOOKKEEPING (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)	
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)	
TECHNICAL ELECTIVES: ***Must select one course***				
ACC124	Individual Taxation	4	ACC132 (pre/co-req)	
ACC133	Managerial Accounting	4	ACC132	
ACC228	Business Taxation	4	ACC132	
	Total	**17**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
	Total	**15**		
	TOTAL CREDIT HOURS	**32**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.

Students must still pass the Certified Bookkeepers Examination to become certified.
This examination is administered by the American Institute of Professional Bookkeepers (AIPB.org).

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BOOKKEEPING (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS124	Business Analysis with Algebra#	4	
ACC130	Business Law & Ethics	3	
		8	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
BUS121	Business Administration^	4	IDS102 **or** Proficiency
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		14	
Third Semester			
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)
Technical Elective [1]		4	
		10	
	TOTAL CREDITS	**32**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Technical Electives: ACC124, ACC133, ACC228

Students must still pass the Certified Bookkeepers Examination to become certified.
This examination is administered by the American Institute of Professional Bookkeepers (AIPB.org).

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ONE-YEAR CERTIFICATE

2005

ENROLLED AGENT (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC124	Individual Taxation	4	ACC132 (pre/co-req)	
ACC132	Financial Accounting++	4	BUS124	
ACC228	Business Taxation	4	ACC132	
ACC239	Estate & Income Tax Planning	4	ACC124	
ACC229	Computerized Accounting Applications	3	(AOT226 and ITD122) **and** (ACC121 or ACC132 or ENT123)	
	Total	**19**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
	Total	**14**		
	TOTAL CREDIT HOURS	**33**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.

Students must still pass the Enrolled Agent Examination to become certified. This examination is administered by the Internal Revenue Service (IRS).

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ENROLLED AGENT (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS124	Business Analysis with Algebra#	4	
ACC130	Business Law & Ethics	3	
		8	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC124	Individual Taxation	4	ACC132 (pre/co-req)
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		14	
Third Semester			
ACC228	Business Taxation	4	ACC132
ACC239	Estate & Income Tax Planning	4	ACC124
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)
		11	
	TOTAL CREDITS	**33**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.

Students must still pass the Enrolled Agent Examination to become certified.
This examination is administered by the Internal Revenue Service (IRS).

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ONE-YEAR CERTIFICATE

2006

FUNDAMENTAL PAYROLL (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC124	Individual Taxation	4	ACC132 (pre/co-req)	
ACC132	Financial Accounting++	4	BUS124	
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)	
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)	
ACC234	Advanced Payroll	3	ACC227	
BUS124	Business Analysis with Algebra#	4		
	Total	**21**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
	Total	**10**		
	TOTAL CREDIT HOURS	**31**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.

Students must still pass the Fundamental Payroll Examination to become certified. This examination is administered by the American Payroll Association.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

FUNDAMENTAL PAYROLL (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS124	Business Analysis with Algebra#	4	
ACC130	Business Law & Ethics	3	
		8	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		13	
Third Semester			
ACC234	Advanced Payroll	3	ACC227
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)
ACC124	Individual Taxation	4	
		10	
	TOTAL CREDITS	**31**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.

Students must still pass the Fundamental Payroll Examination to become certified.
This examination is administered by the American Payroll Association.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2007

ACCOUNTING – TAX MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC124	Individual Taxation	4	ACC132 (pre/co-req)	
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	4	ACC221	
ACC223	Cost Accounting	4	ACC127 **and** ACC133	
ACC225 **or** ACC 237	Auditing+++ **or** Fraud Examination+++	4	ACC222 (pre/co-req) **or** ACC133	
ACC228	Business Taxation	4	ACC132	
TECHNICAL ELECTIVE: ***Must select one course***				
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)	
ACC239	Estate & Income Tax Planning	4	ACC124	
BTD223	Business Co-op	3	*Department Chair Approval*	
	Total	**35-36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC127	Quantitative Business Statistics	4	BUS124	
ACC130	Business Law & Ethics	3		
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
BUS 221	Microeconomics^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 or Proficiency	
FIN220	Business Finance	4	ACC133	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**38**		
	TOTAL CREDIT HOURS	**73-74**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better.
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
+++Course should be chosen following consultation with academic advisor.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

Revised 2/2014

2007

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ACCOUNTING – TAX MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ACC130	Business Law & Ethics	3	
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
		18	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC127	Quantitative Business Statistics	4	BUS124
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ACC124	Individual Taxation	4	ACC132 (pre/co-req)
		18	
Third Semester			
COM121	Effective Speaking	3	
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
ACC228	Business Taxation	4	ACC132
		18	
Fourth Semester			
ACC222	Intermediate Accounting II	4	ACC221
ACC223	Cost Accounting	4	ACC127 **and** ACC133
ACC225	Auditing+++	4	ACC222 (pre/co-req)
or	**or**		
ACC237	Fraud Examination+++		ACC133
FIN220	Business Finance	4	ACC133
Technical Elective [2]		3-4	
		19	
	TOTAL CREDITS	**73-74**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better.
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
+++Course should be chosen following consultation with academic advisor.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)
[2] Technical Elective: ACC227, ACC239, BTD223

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2008

ACCOUNTING – COMPUTER INFORMATION MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC225 **or** ACC237	Auditing+++ **or** Fraud Examination+++	4	ACC222 (pre/co-req) ACC133	
AOT226	Spreadsheet Microsoft Excel^	3	ITD100 or Proficiency	
ACC228	Business Taxation	4	ACC132	
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)	
AOT236	Database Applications Microsoft Access^	3	ITD100 or Proficiency	
TECHNICAL ELECTIVE I: ***Must select one course from the following***				
ACC124	Individual Taxation	4	ACC132 (pre/co-req)	
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)	
ACC234	Advanced Payroll	3	ACC227	
ACC235	Forensic Accounting	3		
BTD223	Business Co-op	3	*Department Chair Approval*	
TECHNICAL ELECTIVE II: ***Must select one course for the following***				
CPD222	Microsoft SQL Server Database Design	3	CPD121	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	Total	**35-36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC127	Quantitative Business Statistics	4	BUS124	
ACC130	Business Law & Ethics	3		
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
BUS 221	Microeconomics^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**72-73**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better.
+Successful completion of ITD102, ITD104, ITD105 and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
+++Course should be chosen following consultation with academic advisor.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Arts & Humanities Elective: HIS121, HIS122, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, PHL122 or SOC225

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ACCOUNTING – COMPUTER INFORMATION MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
ACC130	Business Law & Ethics	3	
		18	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC127	Quantitative Business Statistics	4	BUS124
COM121	Effective Speaking	3	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
Arts and Humanities Elective [1]		3	*Check for prerequisites*
		17	
Third Semester			
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
ACC228	Business Taxation	4	ACC132
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** **(**ITD100 **or** Proficiency)
Technical Elective I [2]		3-4	
		18-19	
Fourth Semester			
AOT226	Spreadsheet Microsoft Excel^	3	ITD100 or Proficiency
AOT236	Database Applications Microsoft Access^	3	ITD100 or Proficiency
ACC225	Auditing+++	4	ACC222 (pre/co-req)
or	**or**		
ACC237	Fraud Examination+++		ACC133
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)
Technical Elective II [3]		3	
		19	
	TOTAL CREDITS	**72-73**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better.
+Successful completion of ITD102, ITD104, ITD105 and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
+++Course should be chosen following consultation with academic advisor.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Arts & Humanities Elective: HIS121, HIS122, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, PHL122 or SOC225
[2] Technical Elective I: ACC124, ACC227, ACC234, ACC235, BTD223
[3] Technical Elective II: CPD222 or WDD121

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2009

ACCOUNTING SERVICES FOR HEALTH ADMINISTRATION MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC223	Cost Accounting	4	ACC127 **and** ACC133	
ACC228	Business Taxation	4	ACC132	
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)	
ACC232	Governmental & Not-for-Profit Accounting	4	ACC132	
ACC237	Fraud Examination	4	ACC133	
MAT231	Reimbursement for Health Care Services+++	3		
	Total	**34**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC127	Quantitative Business Statistics	4	BUS124	
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
BIO125	Medical Terminology+++	3		
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
FIN220	Business Finance	4	ACC133	
HIT230	Health Care Delivery in the U.S.+++	2		
HIT123	Healthcare Legal and Ethical Issues+++**	2	HIT230 (pre-req) **or** HIT121 (co-req)	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**38**		
	TOTAL CREDIT HOURS	**72**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦Requires a "B" or better.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
+++Student must take Health courses in the sequence as shown.
**Students in Accounting Services for Health Administration Major are required to take HIT230. HIT121 is required for Health Information Management and Medical Coding students only.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ACCOUNTING SERVICES FOR HEALTH ADMINISTRATION MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
BIO125	Medical Terminology+++	3	
COM121	Effective Speaking	3	
		17	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC127	Quantitative Business Statistics	4	BUS124
HIT230	Health Care Delivery in the U.S.+++	2	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		16	
Third Semester			
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
ACC232	Governmental & Not-For-Profit Accounting	4	ACC132
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)
MAT231	Reimbursement for Health Care Services+++	3	
		18	
Fourth Semester			
ACC237	Fraud Examination	4	ACC133
ACC223	Cost Accounting	4	ACC127 **and** ACC133
FIN220	Business Finance	4	ACC133
ACC228	Business Taxation	4	ACC132
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
HIT123	Healthcare Legal and Ethical Issues+++**	2	HIT230 (pre-req) **or** HIT121 (co-req)
		21	
	TOTAL CREDITS	**72**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a "B" or better.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

+++Student must take Health courses in the sequence as shown.

**Students in Accounting Services for Health Administration Major are required to take HIT230. HIT121 is required for Health Information Management and Medical Coding students only.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ONE-YEAR CERTIFICATE

2010

BANKING ASSOCIATE (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
FIN221	Investment & Securities	4	ACC132	
FIN227	Money & Banking	3	BUS124	
MKT121	Principles of Marketing	3	BUS221	
MKT221	Sales	3	MKT121 **or** ENT121	
	Total	**17**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
	Total	**18**		
	TOTAL CREDIT HOURS	**35**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BANKING ASSOCIATE (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** proficiency
BUS124	Business Analysis with Algebra#	4	
COM121	Effective Speaking	3	
		12	
Second Semester			
ENG124	College Composition^	3	ENG011 **or** proficiency
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** proficiency
ACC132	Financial Accounting++	4	BUS124
MKT121	Principles of Marketing	3	BUS221
		13	
Third Semester			
MKT221	Sales	3	MKT121 **or** ENT121
FIN221	Investment & Securities	4	ACC132
FIN227	Money & Banking	3	BUS124
		10	
	TOTAL CREDITS	**35**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2011

ACCOUNTING – FORENSIC ACCOUNTING MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC223	Cost Accounting	4	ACC127 **and** ACC133	
ACC228	Business Taxation	4	ACC132	
ACC235	Forensic Accounting	3		
ACC237	Fraud Examination	4	ACC133	
ACC238	Financial Statement Analysis	4	ACC133	
CFS137	Computer Crime and Investigation	3	NET120	
	Total	**34**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC127	Quantitative Business Statistics	4	BUS124	
ACC130	Business Law & Ethics	3		
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
CFS136	Principles of Information Security	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
NET120	PC Upgrading and Maintenance	3		
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**36**		
	TOTAL CREDIT HOURS	**70**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦Requires a "B" or better.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

2011

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ACCOUNTING – FORENSIC ACCOUNTING MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
COM121	Effective Speaking	3	
CFS136	Principles of Information Security	3	
		17	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC235	Forensic Accounting	3	
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
NET120	PC Upgrading and Maintenance	3	
ACC127	Quantitative Business Statistics	4	BUS124
		17	
Third Semester			
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
ACC228	Business Taxation	4	ACC132
ACC130	Business Law & Ethics	3	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		18	
Fourth Semester			
ACC237	Fraud Examination	4	ACC133
ACC223	Cost Accounting	4	ACC127 **and** ACC133
ACC238	Financial Statement Analysis	4	ACC133
CFS137	Computer Crime and Investigation	3	NET120
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		18	
	TOTAL CREDITS	**70**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a "B" or better.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ONE-YEAR CERTIFICATE

2012

COMPUTER-INTEGRATED ACCOUNTING (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)	
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)	
AOT226	Spreadsheet – Microsoft Excel^▲	3	ITD100 **or** Proficiency	
AOT236	Database Applications – Microsoft Access	3	ITD100 **or** Proficiency	
	Total	**20**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
BUS124	Business Analysis with Algebra#	4		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
	Total	**14**		
	TOTAL CREDIT HOURS	**34**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲Course offerings vary by semester. Please see your academic advisor for availability.

2012

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER-INTEGRATED ACCOUNTING (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS124	Business Analysis with Algebra#	4	
ACC130	Business Law & Ethics	3	
		8	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** proficiency
ENG124	College Composition^	3	ENG011 **or** proficiency
		10	
Third Semester			
ACC133	Managerial Accounting	4	ACC132
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 **or** ACC132 **or** ENT123)
AOT226	Spreadsheet – Microsoft Excel^▲	3	ITD100 **or** proficiency
AOT236	Database Applications – Microsoft Access	3	ITD100 **or** proficiency
		16	
	TOTAL CREDITS	**34**	

^ Based upon SSC placement score.
^^ To promote student success, this course should be taken in the first semester.
+ Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++ Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
# BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
▲ Course offerings vary by semester. Please see your academic advisor for availability.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2055

BUSINESS MANAGEMENT

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	ACC133 **and** MGT121	
MGT224	Human Resource Management	3	MGT121	
MGT227	Operations Management	4	MGT121 **and** (MTH124 or ACC127)	
MKT121	Principles of Marketing	3	BUS221	
TECHNICAL ELECTIVE: ***6 credit hours minimum***				
FIN220	Business Finance	4	ACC133	
MGT222	Small Business Management	3	ACC133 **and** MGT121	
MGT232	International Business	3	BUS121	
MKT226	Supply Chain Management	3	MKT121	
	Total	**34-35**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	None **or** ENG124	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**71-72**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		18	
Second Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
ACC132	Financial Accounting	4	BUS124
COM121	Effective Speaking		None
or	**or**		**or**
ENG230	Business Communication	3	ENG124
		17	
Third Semester			
MGT221	Supervision	3	MGT121
MKT121	Principles of Marketing	3	BUS221
MGT227	Operations Management	4	(MGT121 and MTH124) **or** ACC127
ACC133	Managerial Accounting	4	ACC132
Technical Elective[2]		3	
		17	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MGT223	Business Decision Making	4	ACC133 **and** MGT121
ACC130	Business Law & Ethics	3	
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
Technical Elective[2]		3-4	
		19-20	
	TOTAL CREDITS	**71-72**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

[2] Technical Electives: FIN220, MGT222, MGT232, MKT226

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2058

BUSINESS MANAGEMENT – INT'L BUSINESS MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
ACC134	International Law	3	ACC130	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS223	International Economics	3	BUS221 **and** BUS222	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	ACC133 **and** MGT121	
MGT224	Human Resource Management	3	MGT121	
MGT232	International Business	3	BUS121	
MKT121	Principles of Marketing	3	BUS221	
	Total	**33**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	None **or** ENG124	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**70**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT – INT'L BUSINESS MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		18	
Second Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
COM121	Effective Speaking		None
or	**or**	3	**or**
ENG230	Business Communication		ENG124
ACC132	Financial Accounting	4	BUS124
		17	
Third Semester			
MGT221	Supervision	3	MGT121
MKT121	Principles of Marketing	3	BUS221
ACC133	Managerial Accounting	4	ACC132
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
ACC130	Business Law & Ethics	3	
		16	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
MGT232	International Business	3	BUS121
MGT223	Business Decision Making	4	ACC133 **and** MGT121
BUS223	International Economics	3	BUS221 **and** BUS222
ACC134	International Law	3	ACC130
Arts and Humanities Elective[1]		3	*Check for pre-requisites*
		19	
	TOTAL CREDITS	**70**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2059

BUSINESS MANAGEMENT – SMALL BUSINESS MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT222	Small Business Management	3	ACC133 **and** MGT121	
MGT223	Business Decision Making	4	ACC133 **and** MGT121	
MGT224	Human Resource Management	3	MGT121	
MKT121	Principles of Marketing	3	BUS221	
MKT221	Sales	3	MKT121 **or** ENT121	
MKT226	Supply Chain Management	3	MKT121	
	Total	**33**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	None **or** ENG124	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**70**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241
(All ENG courses' prerequisite: ENG124)

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT – SMALL BUSINESS MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		18	
Second Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
COM121	Effective Speaking	3	None
or	**or**		**or**
ENG230	Business Communication		ENG124
ACC132	Financial Accounting	4	BUS124
		17	
Third Semester			
MGT221	Supervision	3	MGT121
MKT121	Principles of Marketing	3	BUS221
MKT221	Sales	3	MKT121 **or** ENT121
ACC130	Business Law & Ethics	3	
ACC133	Managerial Accounting	4	ACC132
		16	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MGT223	Business Decision Making	4	ACC133 **and** MGT121
MGT222	Small Business Management	3	ACC133 **and** MGT121
MKT226	Supply Chain Management	3	MKT121
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
		19	
	TOTAL CREDITS	**70**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2060

BUSINESS MANAGEMENT – HEALTH SERVICES MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO125	Medical Terminology	3		
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
HIT230	Health Care Delivery in the U.S.	2		
MAT231	Reimbursement for Health Care Services	3	None	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	ACC133 **and** MGT121	
MGT224	Human Resource Management	3	MGT121	
MKT121	Principles of Marketing	3	BUS221	
	Total	**35**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	None **or** ENG124	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**72**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1]Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT – HEALTH SERVICES MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
BIO125	Medical Terminology	3	
		18	
Second Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
COM121	Effective Speaking		None
or	**or**	3	**or**
ENG230	Business Communication		ENG124
ACC132	Financial Accounting	4	BUS124
		17	
Third Semester			
MGT221	Supervision	3	MGT121
MKT121	Principles of Marketing	3	BUS221
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
ACC133	Managerial Accounting	4	ACC132
HIT230	Health Care Delivery in the U.S.	2	
		18	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MGT223	Business Decision Making	4	ACC133 **and** MGT121
ACC130	Business Law & Ethics	3	
MAT231	Reimbursement for Health Care Services	3	None
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		19	
	TOTAL CREDITS	**72**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2061

BUSINESS MANAGEMENT – FINANCE MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
FIN220	Business Finance	4	ACC133	
FIN221	Investments & Securities	4	ACC132	
FIN227	Money & Banking	3	BUS124	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	ACC133 **and** MGT121	
MGT224	Human Resource Management	3	MGT121	
MKT121	Principles of Marketing	3	BUS221	
	Total	**35**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	ENG124	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**72**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT – FINANCE MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		18	
Second Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
ACC132	Financial Accounting	4	BUS124
COM121	Effective Speaking		
or	**or**		
ENG230	Business Communication	3	ENG124
		17	
Third Semester			
MGT221	Supervision	3	MGT121
MKT121	Principles of Marketing	3	BUS221
FIN227	Money & Banking	3	BUS124
ACC133	Managerial Accounting	4	ACC132
FIN221	Investments & Securities	4	ACC132
		17	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MGT223	Business Decision Making	4	ACC133 **and** MGT121
ACC130	Business Law & Ethics	3	
FIN220	Business Finance	4	ACC133
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
		20	
	TOTAL CREDITS	**72**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2062

BUSINESS MANAGEMENT – HUMAN RESOURCES MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	ACC133 **and** MGT121	
MGT224	Human Resource Management***	3	MGT121	
MGT227	Operations Management	4	(MGT121 and MTH124) **or** ACC127	
MKT121	Principles of Marketing	3	BUS221	
TECHNICAL ELECTIVE: *Select two* Business @ a Distance *courses***				
HRM211S	Staffing the Organization	3	MGT224	
HRM212S	Compensation and Benefits	3	MGT224	
HRM213S	Employee Training & Development	3	MGT224	
	Total	**34**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	ENG124	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**71**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
***Business @ a Distance* Edison Community College (Piqua, Ohio) courses are completed online. Student must apply to Edison Community College to take these online courses: HRM211S, HRM212S, HRM213S
***Can substitute *Business @ a Distance* Edison Community College Course HRM110S for MGT224.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Select from: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241
(All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT – HUMAN RESOURCES MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		18	
Second Semester			
COM121	Effective Communication		
or	**or**		
ENG230	Business Communication	3	ENG124
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
ACC132	Financial Accounting++	4	BUS124
		17	
Third Semester			
MGT224	Human Resource Management***	3	MGT121
MKT121	Principles of Marketing	3	BUS221
ACC130	Business Law & Ethics	3	
ACC133	Managerial Accounting	4	ACC132
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		19	
Fourth Semester			
MGT221	Supervision	3	MGT121
MGT223	Business Decision Making	4	ACC133 **and** MGT121
MGT227	Operations Management	4	(MGT121 and MTH124) **or** ACC127
*Human Resources Business @ a Distance course***		3	MGT224
*Human Resources Business @ a Distance course***		3	MGT224
		17	
	TOTAL CREDITS	**71**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

***Business @ a Distance* Edison Community College (Piqua, Ohio) courses are completed online. Student must apply to Edison Community College to take these online courses: HRM211S, HRM212S, HRM213S

***Can substitute *Business @ a Distance* Edison Community College Course HRM110S for MGT224.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Electives: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

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BUSINESS MANAGEMENT – KENT STATE UNIVERSITY BBA DEGREE

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT223	Business Decision Making	4	ACC133 **and** MGT121	
MGT224	Human Resource Management	3	MGT121	
MGT227	Operations Management	4	(MGT121 and MTH124) **or** ACC127	
MKT121	Principles of Marketing	3	BUS221	
	Total	**43**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC223	Cost Accounting	4	ACC127 **and** ACC133	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG231	College Composition II	3	ENG124	
HIS121 **or** HIS122	US History I - to 1877 **or** US History II - from 1877	3		
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094♦) **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
	Total	**30**		
	TOTAL CREDIT HOURS	**73**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "C" or better
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
+Successful completion of ITD102, ITD104, ITD105 and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT – KENT STATE UNIVERSITY BBA DEGREE

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
MTH125	College Algebra^	4	(MTH093 and MTH094♦) **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		19	
Second Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
ACC127	Quantitative Business Statistics	4	BUS124
ENG231	College Composition II	3	ENG124
ACC132	Financial Accounting++	4	BUS124
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
		17	
Third Semester			
MKT121	Principles of Marketing	3	BUS221
COM121	Effective Speaking	3	
MGT227	Operations Management	4	(MGT121 and MTH124) **or** ACC127
ACC133	Managerial Accounting	4	ACC132
PSY121	General Psychology^	3	IDS102 **or** Proficiency
		17	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MGT223	Business Decision Making	4	ACC133 **and** MGT121
HIS121	US History I - to 1877		
or	**or**		
HIS122	US History II - from 1877	3	
ACC130	Business Law & Ethics	3	
ACC223	Cost Accounting	4	ACC127 **and** ACC133
		20	
	TOTAL CREDITS	**73**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "C" or better

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

+Successful completion of ITD102, ITD104, ITD105 and ITD106 may be substituted for ITD122.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

Additional courses for BBA Degree available at Stark State College and accepted at Kent State University:

Course Number	Course Title	Credits Hours	Pre-Requisites
Additional Bridge Courses: *Both Required*			
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
PHL122	Ethics	3	
Two Additional Bridge Science Courses: ***6 Credits Minimum (1 lab course required)***			
BIO101 **or** BIO126	Introduction to Anatomy and Physiology^ **or** Science, Energy, & the Environment (lab)	3 **or** 4 (2 lab hrs)	IDS102 or Proficiency
CHM101 **or** CHM121	Introduction to Chemistry^⅄ **or** Gen., Org., and Bio., Chemistry I (lab)⅄	4 **or** 4 (2 lab hrs)	(MTH093 and MTH094)++ **or** Proficiency HS CHM 2 **or** CHM101
PHY101 **or** PHY121	Principles of Physics (lab)^ **or** College Physics I with Algebra (lab)	4 (2 lab hrs) **or** 4 (2 lab hrs)	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency) MTH135 **or** (MTH 125 and MTH130)
BIO128	Climate Studies (lab)	3 (2 lab hrs)	
BIO129	Meteorology (lab)	3 (2 lab hrs)	
BIO130	Ocean Studies (lab)	3 (2 lab hrs)	
BIO141	General Biology I (lab)	4 (3 lab hrs)	
CHM141	General Chemistry I (lab)⅄	5 (4 lab hrs)	HS CHM 2 **or** CHM101
GEO141	Physical Geology (lab)	4 (2 lab hrs)	

^Based on SSC placement scores.

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

An additional 45 credit hours must be taken at Kent State University to obtain BBA degree.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2080

BUSINESS MANAGEMENT – CULINARY ARTS MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CUL122	Food Fundamentals	3	CUL119 (pre/co) **and** CUL120 (pre/co)	
CUL123	Fundamental Cooking-Preparation I	3	CUL122	
CUL124	Meat & Fish-Preparation II	3	CUL123	
CUL125	Menu Planning	3	CUL119 **and** CUL120	
CUL126	Food Purchasing – Inventory Control	3		
CUL221	Baking & Pastry-Preparation III	3	CUL124	
CUL222	Advanced Cookery-Preparation IV	3	CUL221 (pre/co)	
CUL223	Catering & Buffet/Event Management	3	CUL122	
CUL224	Beverage Management & Service	3	CUL119 **and** CUL120	
CUL230	Culinary Practicum	5	CUL222 (pre/co)	
	Total	**32**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
CUL119	Culinary ServSafe	1		
CUL120	Sanitation & Safety	2		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
SOC225	Cultural Diversity	3		
	Total	**31**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT – CULINARY ARTS MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CUL119	Culinary ServSafe	1	
CUL120	Sanitation & Safety	2	
CUL122	Food Fundamentals	3	CUL119 (pre/co) **and** CUL120 (pre/co)
ENG124	College Composition^	3	ENG011 **or** Proficiency
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency
		13	
Second Semester			
CUL123	Fundamental Cooking – Preparation I	3	CUL122
CUL125	Menu Planning	3	CUL119 **and** CUL120
CUL126	Food Purchasing – Inventory Control	3	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
MGT121	Principles of Management	3	BUS121 **or** ENT120
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		18	
Third Semester			
ACC130	Business Law & Ethics	3	
CUL124	Meat & Fish – Preparation II	3	CUL123
CUL223	Catering & Buffet/Event Management	3	CUL122
CUL224	Beverage Management & Service	3	CUL119 **and** CUL120
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
		15	
Fourth Semester			
CUL221	Baking & Pastry – Preparation III	3	CUL124
CUL230	Culinary Practicum	5	CUL222 (pre/co)
CUL222	Advanced Cookery – Preparation IV	3	CUL221 (pre/co)
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
SOC225	Cultural Diversity	3	
		17	
	TOTAL CREDITS	**63**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2081

BUSINESS MANAGEMENT – SPORTS MANAGEMENT MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT122	Introduction to Sports Management	3	BUS121	
MGT221	Supervision	3	MGT121	
MGT224	Human Resource Management	3	MGT121	
MGT232	International Business	3	BUS121	
MGT235	Facility & Event Management for Sports	3	MGT121 **and** MKT121 **and** ACC132	
MGT236	Sports & Ethics	3		
MKT121	Principles of Marketing	3	BUS221	
MKT225	Sports Sales	3	MKT121	
	Total	**35**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	ENG124	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**31**		
	TOTAL CREDIT HOURS	**66**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANAGEMENT – SPORTS MANAGEMENT MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		18	
Second Semester			
MKT121	Principles of Marketing	3	BUS221
MGT121	Principles of Management	3	BUS121 **or** ENT120
MGT122	Introduction to Sports Management	3	BUS121
ACC127	Quantitative Business Statistics	4	BUS124
ACC132	Financial Accounting++	4	BUS124
		17	
Third Semester			
MGT221	Supervision	3	MGT121
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MKT225	Sports Sales	3	MKT121
ACC133	Managerial Accounting	4	ACC132
MGT224	Human Resource Management	3	MGT121
		16	
Fourth Semester			
COM121	Effective Speaking	3	
or	**or**		
ENG230	Business Communication		ENG124
MGT235	Facility & Event Management for Sports	3	MGT121 **and** MKT121 **and** ACC132
MGT236	Sports & Ethics	3	
MGT232	International Business	3	BUS121
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
		15	
	TOTAL CREDITS	**66**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2305

BUSINESS MANAGEMENT – GAMING MANAGEMENT MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT141	Introduction to Casino Management	3	BUS121	
MGT221	Supervision	3	MGT121	
MGT224	Human Resource Management	3	MGT121	
MGT241	Casino Security	3	MGT141	
MGT243	Gaming Methods	3	MGT141	
MKT131	Casino Marketing	3	BUS121	
	Total	**29**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH124	Statistics^	3	(MTH093 and MTH094♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**31**		
	TOTAL CREDIT HOURS	**60**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "C" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241
(All ENG courses' prerequisite: ENG124)

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BUSINESS MANANGEMENT – GAMING MANAGEMENT MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH124	Statistics^	3	(MTH093 and MTH094) **or** Proficiency
		18	
Second Semester			
MKT131	Casino Marketing	3	BUS121
MGT121	Principles of Management	3	BUS121 **or** ENT120
MGT141	Introduction to Casino Management	3	BUS121
ACC127	Quantitative Business Statistics	4	BUS124
ACC132	Financial Accounting	4	BUS124
		17	
Third Semester			
MGT221	Supervision	3	MGT121
MGT241	Casino Security	3	MGT141
ACC133	Managerial Accounting	4	ACC132
MGT224	Human Resource Management	3	MGT121
		13	
Fourth Semester			
COM121	Effective Speaking	3	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MGT243	Gaming Methods	3	MGT141
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		12	
	TOTAL CREDITS	**60**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "C" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2400

CORPORATE FINANCE

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC228	Business Taxation	4	ACC132	
ACC237	Fraud Examination	4	ACC133	
ACC238	Financial Statement Analysis	4	ACC133	
BUS124	Business Analysis with Algebra#	4		
FIN220	Business Finance	4	ACC133	
FIN224	Risk Management	4	ACC132	
FIN227	Money & Banking	3	BUS124	
	Total	**35**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC127	Quantitative Business Statistics	4	BUS124	
ACC130	Business Law & Ethics	3		
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 or Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**36**		
	TOTAL CREDIT HOURS	**71**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better.
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Select from: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241
(All ENG courses' prerequisite: ENG124)

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

CORPORATE FINANCE

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS121	Business Administration^	4	IDS102 **or** Proficiency
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ACC130	Business Law & Ethics	3	
		18	
Second Semester			
ACC132	Financial Accounting++	4	BUS124
ACC127	Quantitative Business Statistics	4	BUS124
MGT121	Principles of Management	3	BUS121 **or** ENT120
COM121	Effective Speaking	3	
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		17	
Third Semester			
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ACC133	Managerial Accounting	4	ACC132
ACC228	Business Taxation	4	ACC132
FIN227	Money & Banking	3	BUS124
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		17	
Fourth Semester			
ACC237	Fraud Examination	4	ACC133
ACC238	Financial Statement Analysis	4	ACC133
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
FIN224	Risk Management	4	ACC132
FIN220	Business Finance	4	ACC133
		19	
	TOTAL CREDITS	**71**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better.
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
[1] Select from: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241
(All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2070

ENTREPRENEURSHIP

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
ENT121	Entrepreneurial Marketing	3	ENT120	
ENT123	Entrepreneurial Accounting	3	ENT120	
ENT124	Managing Entrepreneurial Growth	3	ENT120	
ENT221	Entrepreneurial Finance	3	ENT120	
ENT223	Entrepreneurship Practicum	5	*Sophomore standing* ***or*** *Department Chair approval*	
ENT224	Entrepreneurial Law	3	ENT120	
ENT225	Global Entrepreneurship	3	ENT120	
MGT233	Business Leadership	3	ENT120	
MGT234	Business Plan Development	3	ENT221	
	Total	**32**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	ENG124	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
HIS122	US History II – from 1877	3		
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MKT221	Sales	3	MKT121 **or** ENT121	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**36**		
	TOTAL CREDIT HOURS	**68**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ENTREPRENEURSHIP

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
HIS122	US History II – from 1877	3	
		18	
Second Semester			
ENT121	Entrepreneurial Marketing	3	ENT120
ENT124	Managing Entrepreneurial Growth	3	ENT120
ENT123	Entrepreneurial Accounting	3	ENT120
ENT221	Entrepreneurial Finance	3	ENT120
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
		15	
Third Semester			
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
MGT234	Business Plan Development	3	ENT221
MKT221	Sales	3	MKT121 **or** ENT121
COM121	Effective Speaking	3	
or	**or**		
ENG230	Business Communication		ENG124
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)
		18	
Fourth Semester			
MGT233	Business Leadership	3	ENT120
ENT223	Entrepreneurship Practicum	5	*Sophomore standing **or** Department Chair approval*
ENT224	Entrepreneurial Law	3	ENT120
ENT225	Global Entrepreneurship	3	ENT120
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
		17	
	TOTAL CREDITS	**68**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ONE-YEAR CERTIFICATE

2071

ENTREPRENEURSHIP (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
ENT121	Entrepreneurial Marketing	3	ENT120	
ENT123	Entrepreneurial Accounting	3	ENT120	
ENT221	Entrepreneurial Finance	3	ENT120	
MGT234	Business Plan Development	3	ENT221	
	Total	**15**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
BUS124	Business Analysis with Algebra#	4		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
	Arts & Humanities Elective[1]	3	*Check for pre-requisites*	
	Total	**17**		
	TOTAL CREDIT HOURS	**32**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ENTREPRENEURSHIP (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG120	Entrepreneurship^	3	IDS102 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
ITD122	Computer for Professionals^+	3	ITD100 **or** Proficiency
ENT221	Entrepreneurial Finance	3	ENG120
BUS124	Business Analysis with Algebra#	4	
		17	
Second Semester			
ENT121	Entrepreneurial Marketing	3	ENT120
MGT234	Business Plan Development	3	ENT221
ENG123	Entrepreneurial Accounting	3	ENT120
COM121	Effective Speaking	3	
Arts & Humanities Elective[1]		3	*Check for pre-requisites*
		15	
	TOTAL CREDITS	**32**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF ARTS

2075

FASHION MERCHANDISING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
CORE CLASSES: ***16 credits required***				
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
FAS121	Fundamentals of the Fashion Industry	3		
FAS122	History of Fashion	3	FAS121	
FAS123	Visual Merchandising	3	FAS121	
FAS221	Introduction to Textiles	3	FAS121	
BUSINESS ELECTIVES: ***9 credit hours minimum***				
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT224	Human Resource Management	3	MGT121	
MKT121	Principles of Marketing	3	BUS221	
MKT221	Sales	3	MKT121 **or** ENT121	
MKT226	Supply Chain Management	3	MKT121	
MKT227	Consumer Behavior	3	MKT121	
MKT229	Market Planning	4	MKT121	
COMPUTER APPLICATIONS				
ITD122	Computer Applications for Professionals^+ **(required)**	3	ITD100 **or** Proficiency	
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours minimum***				
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^ **(required)**	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity **(required)**	3		
ARTS & HUMANITIES: ***12 credit hours minimum***				
COM121	Effective Speaking **(required)**	3		
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
ENGLISH COMPOSITION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: 7 credit hours minimum (1 lab course required)				
BIO101	Introduction to Anatomy & Physiology^	3	IDS102 **or** Proficiency	
BIO125	Medical Terminology	3		
BIO126	Science, Energy and the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM101	Introduction to Chemistry^⅄	4	MTH123 **or** Proficiency	
PHY101	Principles of Physics (lab)^	4	(MTH123 or Proficiency) **and** (IDS102 or Proficiency)	
Mathematics: 3 credit hours minimum				
MTH124	Statistics^	3	(MTH093 and MTH094♦) **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094♦) **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094♦) **or** Proficiency	
	TOTAL CREDIT HOURS *(60 hour minimum)*	**66-72**		

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "C" or better
⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

FASHION MERCHANDISING

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^+ **(required)**	3	ITD100 **or** Proficiency
BUS121	Business Administration^	4	IDS102 **or** Proficiency
FAS121	Fundamentals of the Fashion Industry	3	
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
Mathematics Elective [2]		3-5	*Check for pre-requisites*
		20-22	
Second Semester			
COM121	Effective Speaking **(required)**	3	
BUS221	Microeconomics^ **(required)**	3	IDS102 **or** Proficiency
FAS122	History of Fashion	3	FAS121
English Composition Elective [3]		3	*Check for pre-requisites*
Natural & Physical Sciences Elective ♟ [4]		3	*Check for pre-requisites*
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		18	
Third Semester			
FAS221	Introduction to Textiles	3	FAS121
FAS123	Visual Merchandising	3	FAS121
SOC225	Cultural Diversity **(required)**	3	
Natural & Physical Science Elective ♟ [4]		4	*Check for pre-requisites*
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
Social & Behavioral Science Elective [5]		3	*Check for pre-requisites*
		19	
Fourth Semester			
Business Elective [6]		3-4	*Check for pre-requisites*
Business Elective [6]		3-4	*Check for pre-requisites*
Business Elective [6]		3-4	*Check for pre-requisites*
		9-12	
	TOTAL CREDITS	**66-72**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "C" or better

♟ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

[1] Arts & Humanities Electives: COM121, ENG233, ENG234, HIS121, HIS122, PHL122

[2] Math Elective: MTH124, MTH125, MTH135

[3] English Composition Elective: ENG124, ENG221, ENG230, ENG231

[4] Natural & Physical Science Electives: BIO101, BIO125, BIO126, BIO127, BIO141, BIO142, CHM101, PHY101

[5] Social & Behavioral Science Elective: BUS122, BUS221, BUS222, PSC121, PSY121, SOC121, SOC225

[6] Business Electives: ACC130, ACC132, ACC133, ENT120, MGT121, MGT221, MGT224, MKT121, MKT221, MKT226, MKT227, MKT229

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2300

MARKETING MANAGEMENT

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MKT121	Principles of Marketing	3	BUS221	
MKT221	Sales	3	MKT121 **or** ENT121	
MKT222	Advertising	3	MKT121	
MKT227	Consumer Behavior	3	MKT121	
MKT229	Market Planning	4	MKT121	
MKT233	Market Research	3	MKT121 **and** ACC127	
MKT236	E-Marketing	3	MKT121	
	Total	**33**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	ENG124	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**70**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MARKETING MANAGEMENT

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
		18	
Second Semester			
MKT121	Principles of Marketing	3	BUS221
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
ACC132	Financial Accounting++	4	BUS124
COM121	Effective Speaking		
or	**or**		
ENG230	Business Communication	3	ENG124
		17	
Third Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MKT221	Sales	3	MKT121 **or** ENT121
MKT222	Advertising	3	MKT121
ACC133	Managerial Accounting	4	ACC132
MKT227	Consumer Behavior	3	MKT121
		19	
Fourth Semester			
MKT229	Market Planning	4	MKT121
MKT233	Market Research	3	MKT121 **and** ACC127
MKT236	E-Marketing	3	MKT121
ACC130	Business Law & Ethics	3	
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		16	
	TOTAL CREDITS	**70**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2301

MARKETING MANAGEMENT – SALES MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT224	Human Resource Management	3	MGT121	
MKT121	Principles of Marketing	3	BUS221	
MKT221	Sales	3	MKT121 **or** ENT121	
MKT226	Supply Chain Management	3	MKT121	
MKT227	Consumer Behavior	3	MKT121	
MKT229	Market Planning	4	MKT121	
	Total	**33**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	ENG124	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**70**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MARKETING MANAGEMENT – SALES MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
		18	
Second Semester			
MKT121	Principles of Marketing	3	BUS221
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
COM121	Effective Speaking	3	
or	**or**		
ENG230	Business Communication		ENG124
ACC132	Financial Accounting++	4	BUS124
		17	
Third Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MKT221	Sales	3	MKT121 **or** ENT121
ACC133	Managerial Accounting	4	ACC132
MKT227	Consumer Behavior	3	MKT121
		16	
Fourth Semester			
MGT221	Supervision	3	MGT121
MKT226	Supply Chain Management	3	MKT121
MGT224	Human Resource Management	3	MGT121
MKT229	Market Planning	4	MKT121
ACC130	Business Law & Ethics	3	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*
		19	
	TOTAL CREDITS	**70**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

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MARKETING MANAGEMENT – LOGISTICS MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MKT121	Principles of Marketing	3	BUS221	
MKT226	Supply Chain Management	3	MKT121	
MKT229	Market Planning	4	MKT121	
MKT233	Market Research	3	MKT121 **and** ACC127	
MKT234	Principles of Transportation	3	MKT226	
MKT235	Introduction to Logistics	4	ACC127 **and** MKT226	
MKT236	E-Marketing	3	MKT121	
	Total	**34**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	ENG124	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 **and** MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**37**		
	TOTAL CREDIT HOURS	**71**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MARKETING MANAGEMENT – LOGISTICS MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
ITD122	Computer Applications for Professionals^+	3	ITD100 **or** Proficiency
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
		18	
Second Semester			
MKT121	Principles of Marketing	3	BUS221
ACC127	Quantitative Business Statistics	4	BUS124
ACC132	Financial Accounting++	4	BUS124
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
COM121	Effective Speaking		
or	**or**		
ENG230	Business Communication	3	ENG124
		17	
Third Semester			
MGT121	Principles of Management	3	BUS121 **or** ENT120
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MKT226	Supply Chain Management	3	MKT121
MKT236	E-Marketing	3	MKT121
ACC133	Managerial Accounting	4	ACC132
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		19	
Fourth Semester			
MKT229	Market Planning	4	MKT121
MKT233	Market Research	3	MKT121 **and** ACC127
MKT234	Principles of Transportation	3	MKT226
MKT235	Introduction to Logistics	4	ACC127 **and** MKT226
ACC130	Business Law & Ethics	3	
		17	
	TOTAL CREDITS	**71**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
+Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

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MARKETING MANAGEMENT – E-COMMERCE MARKETING MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MKT121	Principles of Marketing	3	BUS221	
MKT222	Advertising	3	MKT121	
MKT229	Market Planning	4	MKT121	
MKT236	E-Marketing	3	MKT121	
WDD121	Internet/Intranet Design & Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD122	Web Graphics Design	3	WDD121	
WDD123	Internet Design Tools	3	WDD121	
WDD221	Web Development with Javascript AJAX	3	WDD121	
	Total	**36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC130	Business Law & Ethics	3		
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis with Algebra#	4		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
COM121 **or** ENG230	Effective Speaking **or** Business Communication	3	ENG124	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency	
	Arts & Humanities Elective [1]	3	*Check for pre-requisites*	
	Total	**34**		
	TOTAL CREDIT HOURS	**70**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a "B" or better
++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.
#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MARKETING MANAGEMENT – E-COMMERCE MARKETING MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BUS121	Business Administration^	4	IDS102 **or** Proficiency
WDD121	Internet/Intranet Design & Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
BUS124	Business Analysis with Algebra#	4	
ENG124	College Composition^	3	ENG011 **or** Proficiency
		18	
Second Semester			
MKT121	Principles of Marketing	3	BUS221
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092♦) **or** Proficiency
ACC127	Quantitative Business Statistics	4	BUS124
ACC132	Financial Accounting++	4	BUS124
WDD123	Internet Design Tools	3	WDD121
		17	
Third Semester			
COM121	Effective Speaking	3	
or	**or**		
ENG230	Business Communication		ENG124
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
MKT229	Market Planning	4	MKT121
MGT121	Principles of Management	3	BUS121 **or** ENT120
ACC133	Managerial Accounting	4	ACC132
		17	
Fourth Semester			
WDD122	Web Design Graphics	3	WDD121
MKT222	Advertising	3	MKT121
ACC130	Business Law & Ethics	3	
MKT236	E-Marketing	3	MKT121
WDD221	Web Development with Javascript AJAX	3	WDD121
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
		18	
	TOTAL CREDITS	**70**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a "B" or better

++Students may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] Arts & Humanities Elective: HIS121, HIS122, PHL122, SOC225, ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241 (All ENG courses' prerequisite: ENG124)

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2013

BASIC ACCOUNTING SKILLS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting++	4	BUS124	
ACC227	Payroll Accounting	3	ACC121 **or** ACC132 (pre/co-req)	
ACC229	Computerized Accounting Applications	3	ITD122 **and** (ACC121 or ACC132 or ENT123)	
BUS124	Business Analysis with Algebra#	4		
	TOTAL CREDIT HOURS	**14**		

^Based upon SSC placement score.

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

#BUS124 is the equivalent to BUS123. Students who have successfully completed BUS123 do not need to take BUS124.

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2014

FINANCIAL ACCOUNTING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
ACC132	Financial Accounting++	4	BUS124	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	4	ACC221	
	TOTAL CREDIT HOURS	**16**		

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2015

MANAGERIAL ACCOUNTING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC127	Quantitative Business Statistics	4	BUS124	
ACC132	Financial Accounting++	4	BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC223	Cost Accounting	4	ACC127 **and** ACC133	
	TOTAL CREDIT HOURS	**16**		

++Student may elect to take ACC121 Principles of Accounting as an introduction to accounting prior to taking this course.

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2016

TAXATION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC124	Individual Taxation	4	ACC132 (pre/co-req)	
ACC228	Business Taxation	4	ACC132	
ACC239	Estate and Income Tax Planning	4	ACC124	
ACC234	Advanced Payroll	3	ACC227	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2072

ENTREPRENEURSHIP

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MGT234	Business Plan Development	3	ENT221	
ENT124	Managing Entrepreneurial Growth	3	ENT120	
ENT121	Entrepreneurial Marketing	3	ENT120	
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
	TOTAL CREDIT HOURS	**12**		

^Based upon SSC placement score.

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2073

ADVANCED ENTREPRENEURSHIP

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MGT234	Business Plan Development	3	ENT221	
ENT124	Managing Entrepreneurial Growth	3	ENT120	
ENT224	Entrepreneurial Law	3	ENT120	
ENT225	Global Entrepreneurship	3	ENT120	
ENT223	Entrepreneurship Practicum	5	*Sophomore standing* ***or*** *Department Chair approval*	
MGT233	Business Leadership	3	ENT120	
ENT123	Entrepreneurial Accounting	3	ENT120	
	TOTAL CREDIT HOURS	**23**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2074

INTERNATIONAL BUSINESS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MGT232	International Business	3	BUS121	
BUS223	International Economics	3	BUS221 **and** BUS222	
ACC134	International Law	3	ACC130	
	TOTAL CREDIT HOURS	**9**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2076

QUALITY MANAGEMENT

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	ACC133 **and** MGT121	
MGT227	Operations Management	4	MGT121 **and** MTH124 **or** ACC127	
	TOTAL CREDIT HOURS	**14**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2077

SALES

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MKT221	Sales	3	MKT121 **or** ENT121	
MKT227	Consumer Behavior	3	MKT121	
MKT121	Principles of Marketing	3	BUS221	
MKT226	Supply Chain Management	3	MKT121	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BUSINESS AND ENTREPRENEURIAL STUDIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2078

SUPERVISION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MGT121	Principles of Management	3	BUS121 **or** ENT120	
MGT221	Supervision	3	MGT121	
SOC225	Cultural Diversity	3		
COM121	Effective Speaking	3		
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

EDUCATION

In an effort to meet the needs of students, courses required in each of the programs are scheduled in sequence to accommodate those attending on a full-time or part-time basis. All students should consult their academic advisors to plan their schedules and course sequence appropriately. In order to keep pace with progress, the College reserves the right to change fees, academic programs, course descriptions, or any other statements, contained in this catalog at the discretion of the College or its Board of Trustees.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF SCIENCE

1060

EDUCATION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
COMPUTER APPLICATIONS				
EDU126	Educational Technology **(required)**	3		
WRITTEN & ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG231	College Composition II **(required)**	3	ENG124	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
COM122	Interpersonal Communication	3		
COM123	Intergroup Communications	3	ENG124	
COM125	Introduction to Communication Theory	3		
SOCIAL & BEHAVIORAL SCIENCES*: 9 credit hours minimum*				
PSC121	Political Science	3		
PSY121	General Psychology^ **(required)**	3	IDS102 **or** Proficiency	
SOC121	Sociology^ **(required)**	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity **(required)**	3		
PSY122	Psych. Of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY221	Abnormal Psychology	3	PSY121	
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ARTS & HUMANITIES: ***9 credit hours minimum***				
COM121	Effective Speaking **(required)**	3		
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Lit: 1785 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

SCIENCES & MATHEMATICS				
Natural and Physical Sciences: ***8 semester credit hours minimum (1 lab course required)***				
BIO121	Anatomy and Physiology I (lab)⍋	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab) **(required)**	4		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123	
CHM101	Introduction to Chemistry^⍋	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., & Bio Chemistry I (lab)⍋	4	HS CHM **or** CHM101	
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency	
PHY121	Physics I (lab)	4	MTH135	
PHY122	Physics II (lab)	4	PHY121	
Mathematics: ***3-4 semester credit hours minimum***				
MTH124 **or** MTH 125	Statistics^ **(required)** **or** College Algebra^ **(required)**	3 4	(MTH093 and MTH094)++ **or** Proficiency	
MTH135	Precalculus^+ *– A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
EDUCATION: ***9 credit hours required***				
EDU130	Introduction to the Teaching Profession^+ (10 O.H.)	3	ENG011 **or** Proficiency	
EDU225	Exceptional Child+ (5 O.H.)	3	EDU130 **or** EDU131	
EDU229	Educational Psychology+ (5 O.H.)	3	EDU130 **or** EDU131	
ADDITIONAL ELECTIVES TO COMPLETE DEGREE*		**12-14**		
	TOTAL CREDIT HOURS	**60-63**		

^Based on SSC placement scores.

++Minimum grade of "C" required.

⍋Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Based on teacher licensure area of concentration *(see next page)*.

ASSOCIATE OF SCIENCE ELECTIVES

Students should select additional courses from the previous page, choose elective courses from the list below or receive approval from the department chair for other related electives. Please see your academic advisor or transfer institution for assistance with course selection.

ADDITIONAL EDUCATION, LIBERAL ARTS, MATH AND SCIENCE COURSES*	
Biology	**Early Childhood Education and Intervention Specialist**
BIO101 Introduction to Anatomy & Physiology (3)	EDU131 Intro to Child Development (3)
BIO123 Principles of Human Structure & Function (lab) (5)	EDU132 Observation, Assessment, and Group Management (3)
BIO124 Human Diseases (3)	EDU122 Curriculum Design & Instruction (3)
	EDU123 Health and Nutrition (3)
Chemistry	EDU125 Children with Physical Exceptionalities (3)
CHM141 General Chemistry (lab) (5)	EDU221 Language Arts (3)
CHM142 General Chemistry (lab) (5)	EDU223 Community and Family-based Programs (3)
	EDU224 Early Childhood Program Administration (3)
Deaf Education	EDU228 Phonics (3)
ASL121 Introduction to the Deaf Culture & Community (3)	EDU230 Children with Socioemotional Exceptionalities (3)
ASL122 American Sign Language I (3)	
ASL123 Introduction to Interpreting (3)	**English**
ASL124 American Sign Language II (3)	ENG125 Technical Editing & Layout (3)
ASL125 Fingerspelling (2)	ENG227 Writing for Media (3)
ASL221 American Sign Language III (3)	ENG228 Writing for the Web (3)
ASL222 ASL Practicum and Seminar (3)	ENG229 Grant Writing (3)
	Social and Behavioral Sciences
	SOC124 US Social Systems (3)
	SOC222 Juvenile Delinquency (3)

^Based on SSC placement scores.
*Based on teacher licensure area of concentration.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

EDUCATION

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
SOC121	Sociology^	3	IDS102 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
COM121	Effective Speaking	3	
EDU130	Introduction to the Teaching Profession^+	3	ENG011 **or** Proficiency
		16	
Second Semester			
MTH124	Statistics^	3	(MTH093 and MTH094)++
or	**or**		**or** Proficiency
MTH125	College Algebra^	4	(MTH093 and MTH094)++
			or Proficiency
SOC225	Cultural Diversity	3	
ENG231	College Composition II	3	ENG124
EDU126	Educational Technology	3	
*Additional Elective**		3-5	
		15-18	
Third Semester			
Arts & Humanities Elective [1]		3	
BIO127	Human Biology	4	
EDU229	Educational Psychology+	3	EDU130 or EDU131
*Additional Elective**		3-5	
*Additional Elective**		3-5	
		16-20	
Fourth Semester			
Arts & Humanities Elective [1]		3	
EDU225	Exceptional Child+	3	EDU130 or EDU131
Natural & Physical Science Elective⅄ [2]		4	
*Additional Elective**		3-5	
		13-15	
	TOTAL CREDITS	**60-63**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

+Requires a grade of "C" or better.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Arts & Humanities Electives: ENG233, ENG234, HIS121, HIS122, PHL122.

[2] Natural & Physical Science Elective: BIO121, BIO122, BIO126, BIO127, BIO141, BIO142, BIO221, CHM101, CHM121, CHM122, PHY101, PHY121, PHY122.

*Additional Electives: Based on teacher licensure area of concentration. *(See previous page for additional elective options.)*

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF APPLIED SCIENCE

1050

EARLY CHILDHOOD EDUCATION

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
EDU122	Curriculum Design & Instruction++ (15 O.H.)	3	EDU131	
EDU123	Health & Nutrition (5 O.H.)	3	EDU131	
EDU124	Infant-Toddler Curriculum++ (5 O.H.)	2	EDU131	
EDU131	Introduction to Child Development^++ (15 O.H.)	3	ENG011 **or** Proficiency	
EDU132	Observation, Assessment, and Group Management^++ (10 O.H.)	3	ENG011 **or** Proficiency	
EDU221	Language Arts++ (10 O.H.)	3	EDU122	
EDU223	Community & Family-Based Programs++ (5 O.H.)	3	EDU131	
EDU224	Early Childhood Program Administration	3	EDU131	
EDU225	The Exceptional Child++ (5 O.H.)	3	EDU130 **or** EDU131	
EDU227	ECE Practicum & Seminar (210 Hours)++	3	(EDU128 or EDU221) **and** EDU132 **and** EDU225 (pre/co)	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity++	3		
PHL122	Ethics	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH108 **or** MTH124	Explorations in Modern Mathematics^ **or** Statistics^	3	(MTH091 and MTH092)+ **or** Proficiency (MTH093 and MTH094)++ **or** Proficiency	
COM121	Effective Speaking	3		
BIO126 **or** BIO127	Science, Energy, & the Environment (lab) **or** Human Biology (lab)	4		
EDU126	Educational Technology	3		
EDU130	Intro to the Teaching Profession^++ (10 O.H.)	3	ENG011 **or** Proficiency	
EDU229	Educational Psychology (5 O.H.)	3	EDU130 **or** EDU131	
	Total	**31**		
	Total Credit Hours	**61**		

^Based on SSC placement score

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

Note: O.H. = Observation Hours Required. Students must successfully complete all required observation hours and other course assignments in order to pass the course.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

EARLY CHILDHOOD EDUCATION

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
EDU131	Introduction to Child Development^++ (15 O.H.)	3	ENG011 **or** Proficiency
EDU132	Observation, Assessment, and Group Management^++ (10 O.H.)	3	ENG011 **or** Proficiency
EDU126	Educational Technology	3	
PSY121	General Psychology^	3	IDS102 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		16	
Second Semester			
EDU122	Curriculum Design and Instruction++ (15 O.H.)	3	EDU131
EDU123	Health & Nutrition (5 O.H.)	3	EDU131
EDU225	The Exceptional Child++ (5 O.H.)	3	EDU130 **or** EDU131
MTH108	Explorations in Modern Mathematics^	3	(MTH091 and MTH092)+
or	**or**		**or** Proficiency
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
COM121	Effective Speaking	3	
		15	
Third Semester			
EDU130	Intro to the Teaching Profession^++ (10 O.H.)	3	ENG011 **or** Proficiency
EDU221	Language Arts++ (10 O.H.)	3	EDU122
EDU223	Community & Family-based Program++ (5 O.H.)	3	EDU131
SOC225	Cultural Diversity++	3	
EDU124	Infant-Toddler Curriculum++ (5 O.H.)	2	EDU131
		14	
Fourth Semester			
EDU224	Early Childhood Program Administration	3	EDU131
EDU227	ECE Practicum and Seminar (210 Hours)++	3	(EDU128 or EDU221) **and** EDU132 **and** EDU225 (pre/co)
EDU229	Educational Psychology (5 O.H.)	3	EDU130 **or** EDU131
PHL122	Ethics	3	
BIO126	Science, Energy, & the Environment (lab)		
or	**or**		
BIO127	Human Biology (lab)	4	
		16	
	TOTAL CREDITS	**61**	

^Based on SSC placement score

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

Note: O.H. = Observation Hours Required. Students must successfully complete all required observation hours and other course assignments in order to pass the course.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISON
ASSOCIATE OF APPLIED SCIENCE

1051

EARLY CHILDHOOD EDUCATION – INTERVENTION SPECIALIST MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EDU122	Curriculum Design & Instruction++ (15 O.H.)	3	EDU131	
EDU123	Health & Nutrition (5 O.H.)	3	EDU131	
EDU125	Children w/Physical Exceptionalities++ (5 O.H.)	3	EDU131	
EDU131	Introduction to Child Development^++ (15 O.H.)	3	ENG011 **or** Proficiency	
EDU132	Observation, Assessment, and Group Management^++ (10 O.H.)	3	ENG011 **or** Proficiency	
EDU221	Language Arts++ (10 O.H.)	3	EDU122	
EDU223	Community & Family-Based Programs++ (5 O.H.)	3	EDU131	
EDU225	The Exceptional Child++ (5 O.H.)	3	EDU130 **or** EDU131	
EDU227	ECE Practicum & Seminar (210 Hours)+ +	3	(EDU128 or EDU221) **and** EDU132 **and** EDU225 (pre/co)	
EDU230	Children w/Socioemotional Exceptionalities++ (5 O.H.)	3	EDU131	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity++	3		
PHL122	Ethics	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH108 **or** MTH124	Explorations in Modern Mathematics^ **or** Statistics^	3	(MTH091 and MTH092)+ **or** Proficiency (MTH093 and MTH094)++ **or** Proficiency	
COM121	Effective Speaking	3		
BIO126 **or** BIO127	Science, Energy, & the Environment (lab) **or** Human Biology (lab)	4		
EDU126	Educational Technology	3		
EDU130	Intro to the Teaching Profession^++ (10 O.H.)	3	ENG011 **or** Proficiency	
EDU229	Educational Psychology (5 O.H.)	3	EDU130 **or** EDU131	
	Total	**31**		
	Total Credit Hours	**62**		

^Based on SSC placement score
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
++Minimum grade of "C" required.

Note: O.H. = Observation Hours Required. Students must successfully complete all required observation hours and other course assignments in order to pass the course.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

EARLY CHILDHOOD EDUCATION – INTERVENTION SPECIALIST

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
EDU131	Introduction to Child Development^++ (15 O.H.)	3	ENG011 **or** Proficiency
EDU132	Observation, Assessment, and Group Management^++ (10 O.H.)	3	ENG011 **or** Proficiency
EDU126	Educational Technology	3	
PSY121	General Psychology^	3	IDS102 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		16	
Second Semester			
EDU122	Curriculum Design and Instruction++ (15 O.H.)	3	EDU131
EDU123	Health & Nutrition (5 O.H.)	3	EDU131
EDU225	The Exceptional Child++ (5 O.H.)	3	EDU130 **or** EDU131
MTH108	Explorations in Modern Mathematics^	3	(MTH091 and MTH092)+
or	**or**		**or** Proficiency
MTH124	Statistics^	3	(MTH093 and MTH094)++
			or Proficiency
COM121	Effective Speaking	3	
		15	
Third Semester			
EDU125	Children w/Physical Exceptionalities++ (5 O.H.)	3	EDU131
EDU130	Intro to the Teaching Profession^++ (10 O.H.)	3	ENG011 **or** Proficiency
EDU221	Language Arts++ (10 O.H.)	3	EDU122
EDU223	Community & Family-based Program++ (5 O.H.)	3	EDU131
SOC225	Cultural Diversity++	3	
		15	
Fourth Semester			
EDU227	ECE Practicum and Seminar (210 Hours)+ +	3	(EDU128 or EDU221) **and**
			EDU132 **and** EDU225 (pre/co)
EDU229	Educational Psychology (5 O.H.)	3	EDU130 **or** EDU131
EDU230	Children w/Socioemotional Exceptionalities++ (5 O.H.)	3	EDU131
PHL122	Ethics	3	
BIO126	Science, Energy, & the Environment (lab)		
or	**or**		
BIO127	Human Biology (lab)	4	
		16	
	TOTAL CREDITS	**62**	

^Based on SSC placement score
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
++Minimum grade of "C" required.

Note: O.H. = Observation Hours Required. Students must successfully complete all required observation hours and other course assignments in order to pass the course.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISON
ASSOCIATE OF APPLIED SCIENCE

1053

EARLY CHILDHOOD EDUCATION – INFANT AND TODDLER MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EDU123	Health and Nutrition (5 O.H.)	3	EDU131	
EDU124	Infant-Toddler Curriculum++ (5 O.H.)	2	EDU131	
EDU127	Infant and Toddler Group Care++ (5 O.H.)	3	EDU131	
EDU128	Responsive Infant and Toddler Environment++ (5 O.H.)	3	EDU131	
EDU129	Relationship Development for Infants and Toddlers++ (5 O.H.)	3	EDU127 (pre or co-requisite)	
EDU131	Introduction to Child Development^++ (15 O.H.)	3	ENG011 **or** Proficiency	
EDU132	Observation, Assessment, and Group Management^++ (10 O.H.)	3	ENG011 **or** Proficiency	
EDU223	Community & Family-Based Programs++ (5 O.H.)	3	EDU131	
EDU225	The Exceptional Child++ (5 O.H.)	3	EDU130 **or** EDU131	
EDU227	ECE Practicum & Seminar (210 Hours) ++	3	(EDU128 or EDU221) **and** EDU132 **and** EDU225 (pre/co)	
	Total	**29**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity++	3		
PHL122	Ethics	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH108 **or** MTH124	Explorations in Modern Mathematics^ **or** Statistics^	3	(MTH091 and MTH092)+ **or** Proficiency (MTH093 and MTH094)++ **or** Proficiency	
COM121	Effective Speaking	3		
BIO126 **or** BIO127	Science, Energy, & the Environment (lab) **or** Human Biology (lab)	4		
EDU126	Educational Technology	3		
EDU130	Intro to the Teaching Profession^++ (10 O.H.)	3	ENG011 **or** Proficiency	
EDU229	Educational Psychology (5 O.H.)	3	EDU130 **or** EDU131	
	Total	**32**		
	Total Credit Hours	**61**		

^Based on SSC placement score
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
++Minimum grade of "C" required.

Note: O.H. = Observation Hours Required. Students must successfully complete all required observation hours and other course assignments in order to pass the course.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

EARLY CHILDHOOD EDUCATION – INFANT AND TODDLER MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
EDU131	Introduction to Child Development^++ (15 O.H.)	3	ENG011 **or** Proficiency
EDU132	Observation, Assessment, and Group Management^++ (10 O.H.)	3	ENG011 **or** Proficiency
EDU126	Educational Technology	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
COM121	Effective Speaking	3	
		16	
Second Semester			
EDU128	Responsive Infant and Toddler Environment++ (5 O.H.)	3	EDU131
EDU123	Health and Nutrition (5 O.H.)	3	EDU131
EDU127	Infant and Toddler Group Care++ (5 O.H.)	3	EDU131
PSY121	General Psychology^	3	IDS102 **or** Proficiency
MTH108	Explorations in Modern Mathematics^	3	(MTH091 and MTH092)+
or	**or**		**or** Proficiency
MTH124	Statistics^	3	(MTH093 and MTH094)++
			or Proficiency
		15	
Third Semester			
SOC225	Cultural Diversity++	3	
EDU124	Infant and Toddler Curriculum++ (5 O.H.)	2	EDU131
EDU130	Intro to the Teaching Profession^++ (10 O.H.)	3	ENG011 **or** Proficiency
EDU229	Educational Psychology (5 O.H.)	3	EDU130 **or** EDU131
BIO126	Science, Energy, & the Environment (lab)		
or	**or**		
BIO127	Human Biology (lab)	4	
		15	
Fourth Semester			
EDU129	Relationship Development for Infants and Toddlers++ (5 O.H.)	3	EDU127 (pre or co-requisite)
EDU223	Community & Family-based Programs++ (5 O.H.)	3	EDU131
EDU225	The Exceptional Child++ (5 O.H.)	3	EDU130 **or** EDU131
EDU227	ECE Practicum and Seminar (210 Hours) ++	3	(EDU128 or EDU221) **and**
			EDU132 **and** EDU225 (pre/co)
PHL122	Ethics	3	
		15	
	TOTAL CREDITS	**61**	

^Based on SSC placement score
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
++Minimum grade of "C" required.

Note: O.H. = Observation Hours Required. Students must successfully complete all required observation hours and other course assignments in order to pass the course.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ONE-YEAR CERTIFICATE

1075

AMERICAN SIGN LANGUAGE (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ASL121	Introduction to the Deaf Culture & Community++ (5 O.H.)	3		
ASL122	American Sign Language I++ (10 O.H.)	3	ASL121 (Pre or Co-requisite)	
ASL123	Introduction to Interpreting++ (5 O. H.)	3		
ASL124	American Sign Language II++ (10 O. H.)	3	ASL122 **and** ASL125 (Pre or Co-requisite)	
ASL125	Fingerspelling (5 O. H.)	2		
ASL221	American Sign Language III++ (10 O.H.)	3	ASL124	
ASL222	American Sign Language Practicum/Seminar (210 Hours)++	3	ASL123 **and** ASL221 (Pre or Co-requisite)	
	Total	**21**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121	Effective Speaking	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC123	Dynamics of the Family	3		
	Total	**12**		
	TOTAL CREDIT HOURS	**33**		

^Based on SSC placement score

^^To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

Note: O.H. = Observation Hours Required. Students must successfully complete all required observation hours and other course assignments in order to pass the course.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time students who plan to finish in one year.

AMERICAN SIGN LANGUAGE (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ASL121	Introduction to the Deaf Culture and Community++ (5 O.H.)	3	
ASL122	American Sign Language I++ (10 O.H.)	3	ASL121 (Pre or Co-requisite)
ASL125	Fingerspelling (5 O.H.)	2	
COM121	Effective Speaking	3	
		12	
Second Semester			
ASL124	American Sign Language II++ (10 O.H.)	3	ASL122 **and** ASL125 (Pre or Co-requisite)
ASL123	Introduction to Interpreting++ (5 O.H.)	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
		12	
Third Semester			
ASL221	American Sign Language III++ (10 O.H.)	3	ASL124
ASL222	American Sign Language Practicum/Seminar (210 Hours)++	3	ASL123 **and** ASL221 (Pre or Co-requisite)
SOC123	Dynamics of the Family	3	
		9	
	Total Credit Hours	**33**	

^Based on SSC placement score
^^To promote student success, this course should be taken in the first semester.
++Minimum grade of "C" required.

Note: O.H. = Observation Hours Required. Students must successfully complete all required observation hours and other course assignments in order to pass the course.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

CAREER ENHANCEMENT CERTIFICATE

1049

INFANT TODDLER

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EDU123	Health and Nutrition (5 O.H.)	3	EDU131	
EDU124	Infant Toddler Curriculum++ (5 O.H.)	2	EDU131	
EDU127	Infant and Toddler Group Care++ (5 O.H.)	3	EDU131	
EDU128	Responsive Infant and Toddler Environment++ (5 O.H.)	3	EDU131	
EDU129	Relationship Development for Infants and Toddlers++ (5 O.H.)	3	EDU127 *(pre or co-req)*	
EDU131	Introduction to Child Development^++ (15 O.H.)	3	ENG011 **or** Proficiency	
	TOTAL CREDIT HOURS	**17**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
EDU131	Introduction to Child Development^++ (10 O.H.)	**3**	ENG011 **or** Proficiency
Second Semester			
EDU128	Responsive Infant and Toddler Environment++ (5 O.H.)	3	EDU131
EDU123	Health and Nutrition (5 O.H.)	3	EDU131
EDU124	Infant Toddler Curriculum++ (5 O.H.)	2	EDU131
		8	
Third Semester			
EDU127	Infant and Toddler Group Care++ (5 O.H.)	3	EDU131
EDU129	Relationship Development for Infants and Toddlers++ (5 O.H.)	3	EDU127 *(pre or co-req)*
		6	
	TOTAL CREDITS	**17**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

Note: O.H. = Observation Hours required. Students must successfully complete all required observation hours and other course assignments in order to pass this course.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

CAREER ENHANCEMENT CERTIFICATE

1054

EARLY CHILDHOOD ADMINISTRATOR CERTIFICATE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EDU131	Introduction to Child Development^++ (15 O.H.)	3	ENG011 **or** Proficiency	
BUS121	Business Administration^++	4	IDS102 **or** Proficiency	
MGT121	Principles of Management++	3	BUS121	
EDU224	Early Childhood Program Administration	3	EDU131	
EDU231	ECE Administrator Practicum and Seminar++	3	MGT121	
	TOTAL CREDIT HOURS	**16**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

		Credit Hours	Pre- and Co-requisites
First Semester			
BUS121	Business Administration^++	4	IDS 102 **or** Proficiency
EDU131	Introduction to Child Development++^ (15 O.H.)	3	ENG011 **or** Proficiency
		7	
Second Semester			
EDU224	Early Childhood Program Administration	3	EDU131
MGT121	Principles of Management	3	BUS121
		6	
Third Semester			
EDU231	ECE Administrator Practicum and Seminar++	3	MGT121
		3	
	TOTAL CREDITS	**16**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

Note: O.H. = Observation Hours required. Students must successfully complete all required observation hours and other course assignments in order to pass this course.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

CAREER ENHANCEMENT CERTIFICATE

1074

AMERICAN SIGN LANGUAGE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ASL121	Introduction to the Deaf Culture & Community++ *(5 O.H.)*	3		
ASL122	American Sign Language I++ *(10 O.H.)*	3	ASL121 *(pre/co-req)*	
ASL124	American Sign Language II++ *(10 O.H.)*	3	ASL122 **and** ASL125 *(pre/co-req)*	
ASL125	Fingerspelling *(5 O.H.)*	2		
ASL221	American Sign Language III++ *(10 O.H.)*	3	ASL124	
	TOTAL CREDIT HOURS	**14**		

^Based upon SSC placement score.
++Minimum grade of "C" required.

Note: *O.H. = Observation Hours Required.* Students must successfully complete all required observation hours and other course assignments in order to pass the course.

The American Sign Language (ASL) Career Enhancement Certificate is designed to provide individuals with an opportunity to gain basic skills in American Sign Language as well as enhance their knowledge and understanding of the deaf culture.

Completion of the ASL Career Enhancement certificate does not prepare an individual to be an interpreter, and courses will not transfer to another institution. However, these courses are transferrable to the ASL One-Year Certificate program (32 credit hours) offered at Stark State College.

Each course requires the student to participate in prescribed observations related to the ASL curriculum. Test-out options or life experience credit for ASL courses are not available.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

AMERICAN SIGN LANGUAGE

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
ASL121	Introduction to the Deaf Culture & Community++ *(5 O.H.)*	3	
ASL122	American Sign Language I++ *(10 O.H.)*	3	ASL121 *(pre/co-req)*
		6	
Second Semester			
ASL124	American Sign Language II++ *(10 O.H.)*	3	ASL122 **and** ASL125 *(pre/co-req)*
ASL125	Fingerspelling *(5 O.H.)*	2	
		5	
Third Semester			
ASL221	American Sign Language III++ *(10 O.H.)*	3	ASL 124
		3	
	TOTAL CREDITS	**14**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

Note: *O.H. = Observation Hours Required.* Students must successfully complete all required observation hours and other course assignments in order to pass the course.

The American Sign Language (ASL) Career Enhancement Certificate is designed to provide individuals with an opportunity to gain basic skills in American Sign Language as well as enhance their knowledge and understanding of the deaf culture.

Completion of the ASL Career Enhancement certificate does not prepare an individual to be an interpreter, and courses will not transfer to another institution. However, these courses are transferrable to the ASL One-Year Certificate program (32 credit hours) offered at Stark State College.

Each course requires the student to participate in prescribed observations related to the ASL curriculum. Test-out options or life experience credit for ASL courses are not available.

ENGINEERING TECHNOLOGIES

In an effort to meet the needs of students, courses required in each of the programs are scheduled in sequence to accommodate those attending on a full-time or part-time basis. All students should consult their academic advisors to plan their schedules and course sequence appropriately. In order to keep pace with progress, the College reserves the right to change fees, academic programs, course descriptions, or any other statements, contained in this catalog at the discretion of the College or its Board of Trustees.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4300

APPLIED INDUSTRIAL TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST121	Blueprint Reading	2		
MST134	Hydraulic & Pneumatic Systems#	6		
MST221	Mechanical Drive Components	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
IET228	Introduction to Robotics	2		
MET123	Material Science	2		
MET225	Manufacturing Processes	3		
TECHNICAL ELECTIVES: ***13 credit hours minimum (typically 3 to 4 classes)***				
	**See Technical Elective list on next page.*	13-21	*Check for pre-requisites*	
	Total	**35-43**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
MTH107	Industrial Math^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency	
ENG124	College Composition ^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
IET121	Industrial Management Concepts	2		
AET121	Sustainable/Alternative Energy Sources	3		
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**28**		
	TOTAL CREDIT HOURS	**63-71**		

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
++Minimum grade of "C" required.
#Also can be taken as two 8-week courses: MST122 Hydraulic & Pneumatic Principles and MST123 Hydraulic & Pneumatic Applications
Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.
*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122
******Technical Electives (more details on next page): AIT122, AIT123, IET223, AIT221, AIT124, AIT125, AIT126, AIT135, AIT223, AIT224, IET270, DET125, MST136, MST137, MST138, MST139, MST124, MST135, MST125, MST126, MST127, MST128, MST131, MST133, MST225, AIT137, AIT225, AIT130, AIT134, AIT222, HVC124, AET122, AET123, AET124, AIT131, AIT133, EST133, EST134, CDL121++, CDL122, CDL123

TECHNICAL ELECTIVES: ***13 credit hours minimum from the list below.***				
Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
AIT122	Machine Tools	3		
AIT123	Advanced Machine Tools	4		
IET223	CNC	4		
AIT221	Advanced CNC Programming	3	IET223 **or** ARL121 **or** ARL122	
AIT124	Principles of Rigging	2		
AIT125	Commercial Plumbing	3		
AIT126	Industrial Electrical Applications and Safety	2		
AIT135	Industrial Robotics	4	IET228	
IET270	Dimensional Metrology & Inspection I^	3	(MTH093 and MTH094)++ **or** Proficiency	
DET125	Basic AutoCAD	3		
MST136	3G Cert. Preparatory	2	MST127 **and** MST128	
MST137	6G Cert. Preparatory	5	MST127 **and** MST128	
MST138	Preparatory Gas Tungsten Arc Welding	5	MST127 **and** MST128	
MST139	Gas Tungsten Arc Welding Titanium/Stainless Steel	3	MST138	
AIT223	Anal/App of Wind Turbine Energy	3	AET121	
AIT224	Wind Turbine Energy Systems	3	AIT223	
CDL121	CDL Class A – Safe Operation and Control##	5	Co-CDL122 **and** Co-CDL123	
CDL122	CDL Class A – Advanced Operations and Maintenance	6	Co-CLD121 **and** Co-CDL123	
CDL123	CDL Class A – Behind the Wheel Street	2	Co-CDL121 **and** Co-CDL122	
AIT133	Advanced Electrical Apps and Safety	2	AIT131	
MST126	Pipefitting Principles & Applications	4		
MST127	Principles of Welding	3	Co-MST128	
MST128	Welding Lab	3	Co-MST127	
MST131	Statistical Process Control Charts^	2	(MTH093 and MTH094)++ **or** Proficiency	
MST133	Press Working Fundamentals	2		
MST225	DC Crane Control	1		
AIT137	CAD/CAM	4	AIT122 **and** IET223	
AIT225	Advanced CAD/CAM	4	AIT137	
AIT130	Structural/Maintenance Welding	3		
AIT134	Predictive & Preventative Main. I	3	MST221 **and** MST125	
AIT222	Predictive & Preventative Main. II	3	AIT134	
HVC124	Mobile Cab Climate Control	2		
AET122	Analysis/Appl. Of Sustain Alter. Energy	3	AET121	
AET123	Sustainable/Alternative Energy Systems	3	AET122	
AET124	Sustainable/Alternative Energy Project	3	AET123	
AIT131	Electrical Applications and Safety	2		
MST124	Furnace Combust Principles	1		
MST135	Plumb & Pipe Code Principles	3		
MST125	Basic Pumps	3		
EST133	Digital Logic Fundamentals	4	EST132	
EST134	Programmable Controller Fundamentals	4	EST133	

^ Based upon SSC placement score.

++Minimum grade of "C" required.

##Participation in CDL121 requires a valid Ohio Driver's License with 2 years driving experience. Must be 18 years of age and show proof of citizenship. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

APPLIED INDUSTRIAL TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
MST121	Blueprint Reading	2	
MTH107	Industrial Math^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency
Technical Elective**##		4-6	*Check for pre-requisites*
		16-18	
Second Semester			
MST134	Hydraulic & Pneumatic Systems#	6	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
IET121	Industrial Management Concepts	2	
MET123	Material Science	2	
Technical Elective**##		3-5	
		17-19	
Third Semester			
ENG221	Technical Report Writing	3	ENG124
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)
COM123	Small Group Communication	3	ENG124
IET228	Introduction to Robotics	2	
MET225	Manufacturing Processes	3	
Technical Elective**##		2-4	
		17-19	
Fourth Semester			
MST221	Mechanical Drive Components	3	
AET121	Sustainable/Alternative Energy Sources	3	
Arts & Humanities Elective*		3	*Check for pre-requisites*
Technical Elective**##		4-6	*Check for pre-requisites*
		13-15	
	TOTAL CREDITS	**63-71**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

#Also can be taken as two 8-week courses: MST122 Hydraulic & Pneumatic Principles and MST123 Hydraulic & Pneumatic Applications

##Participation in CDL121 requires a valid Ohio Driver's License with 2 years driving experience. Must be 18 years of age and show proof of citizenship. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

*Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

**Technical Electives: AIT122, AIT123, IET223, AIT221, AIT124, AIT125, AIT126, AIT135, AIT223, AIT224, IET270, DET125, MST136, MST137, MST138, MST139, MST124, MST135, MST125, MST126, MST127, MST128, MST131, MST133, MST225, AIT137, AIT225, AIT130, AIT134, AIT222, HVC124, AET122, AET123, AET124, AIT131, AIT133, EST133, EST134, CDL121++, CDL122, CDL123

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4308

CNC (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre-and Co-Requisites	Completed Sem./Year
AIT122	Machine Tools	3		
AIT123	Advanced Machine Tools	4	AIT122	
IET223	CNC Programming	4		
AIT221	Advanced CNC Programming	3	IET223 **or** ARL121 **or** ARL122	
DET121 **or** MST121	Engineering Drawing **or** Blueprint Reading	3 **or** 2		
DET125	Basic AutoCAD	3		
IET270	Dimensional Metrology & Inspection I ^	3	(MTH093 and MTH094)++ **or** Proficiency	
AIT137	CAD/CAM	4	AIT122 **and** IET223	
	Total	**27-26**		

NON-TECH Course Number	Course Title	Credits	Pre-and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MET123	Material Science	2		
MTH107	Industrial Math^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency	
	Total	**9**		
	TOTAL CREDIT HOURS	**36/35**		

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

CNC (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH107	Industrial Math^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency
AIT122	Machine Tools	3	
IET270	Dimensional Metrology & Inspection I^	3	(MTH093 and MTH094)++ **or** Proficiency
DET121	Engineering Drawing	3	
or	**or**		
MST121	Blueprint Reading	2	
		12-13	
Second Semester			
DET125	Basic AutoCAD	3	
AIT123	Advanced Machine Tools	4	AIT122
IET223	CNC Programming	4	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		14	
Summer Semester			
AIT221	Advanced CNC Programming	3	IET223 **or** ARL121 **or** ARL122
AIT137	CAD/CAM	4	AIT122 **and** IET223
MET123	Material Science	2	
		9	
	TOTAL CREDITS	**35-36**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4309

WELDING TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST121	Blueprint Reading	2		
MST127	Principles of Welding	3	Co-MST128	
MST128	Welding Lab	3	Co-MST127	
MST136	3G Welding Certification Exam Preparatory	2	MST127 **and** MST128	
MST137	6G Welding Certification Exam Preparatory	5	MST127 **and** MST128	
MST138	Preparatory Gas Tungsten Arc Welding – Titanium/ Stainless Steel	5	MST127 **and** MST128	
MST139	Gas Tungsten Arc Welding-Titanium/Stainless Steel	3	MST138	
	Total	**23**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
MTH107	Industrial Math^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency	
AIT122	Machine Tools	3		
MET123	Material Science	2		
	Total	**9**		
	TOTAL CREDIT HOURS	**32**		

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

+Requires a "B" or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in one year.

WELDING TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MST121	Blueprint Reading	2	
MTH107	Industrial Math^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency
MST127	Principles of Welding	3	Co-MST128
MST128	Welding Lab	3	Co-MST127
AIT122	Machine Tools	3	
		15	
Second Semester			
MST136	3G Welding Certification Preparatory	2	MST127 **and** MST128
MST137	6G Welding Certification Preparatory	5	MST127 **and** MST128
MST138	Preparatory Gas Tungsten Arc Welding	5	MST127 **and** MST128
		12	
Third Semester			
MET123	Material Science	2	
MST139	Gas Tungsten Arc Welding-Titanium/Stainless Steel	3	MST138
		5	
	TOTAL CREDITS	**32**	

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
+Requires a "B" or better.
Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4556

AUTOMATION AND ROBOTICS TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST221	Mechanical Drive Components	3		
IET223	Computer Numerical Control	4		
IET228	Introduction to Robotics	2		
EET120	DC Circuit Analysis	4	Co-MTH135 **or** Co-MTH125	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
EET228	PLCs and Industrial Controls II	3	EET227	
EET263	Industrial Sensors and Advanced Applications	2	EET120 **or** EST130	
DET125	Basic AutoCAD	3		
AIT135	Industrial Robotics	4	IET228	
AIT221	Advanced CNC Programming	3	IET223 **or** ARL121 **or** ARL122	
	Total	**39**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE229	Visual Basic Development	3	CSE122	
NET120	PC Upgrading and Maintenance	3		
EST222	Industrial Networks	3	EET120 **or** EST130	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities elective from the list below**	3	*Check for pre-requisites*	
	Total	**34**		
	TOTAL CREDIT HOURS	**73**		

^ Based on SSC placement

^^ To promote student success, this course should be taken in the first semester.

*Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

++Requires a "C" or better.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

AUTOMATION AND ROBOTICS TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
EET120	DC Circuit Analysis	4	Co-MTH135 **or** Co-MTH125
MST221	Mechanical Drive Components	3	
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		19	
Second Semester			
EET122	AC Circuit Analysis	4	EET120
DET125	Basic AutoCAD	3	
IET223	Computer Numerical Control	4	
CSE229	Visual Basic Development	3	CSE122
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		17	
Third Semester			
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
IET228	Introduction to Robotics	2	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
NET120	PC Upgrading & Maintenance	3	
ENG221	Technical Report Writing	3	ENG124
AIT221	Advanced CNC Programming	3	IET223 **or** ARL121 **or** ARL122
		18	
Fourth Semester			
AIT135	Industrial Robotics	4	IET228
EET228	PLCs and Industrial Controls II	3	EET227
EST222	Industrial Networks	3	EET120 **or** EST130
EET263	Industrial Sensors and Advanced Applications	2	EET120 **or** EST130
COM123	Small Group Communication	3	ENG124
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)
		19	
	TOTAL CREDITS	**73**	

^ Based on SSC placement

^^ To promote student success, this course should be taken in the first semester.

*Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

++Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4555

AUTOMATION AND ROBOTICS TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IET223	Computer Numerical Control	4		
IET228	Introduction to Robotics	2		
EST130	Electrical Circuits and Devices ^	4	(MTH093 and MTH094)++ **or** Proficiency	
AIT221	Advanced CNC Programming	3	IET223 **or** ARL121 **or** ARL122	
EET227	PLCs and Industrial Controls I	3	EST130 **or** EET120	
MST221	Mechanical Drive Components	3		
MST134	Hydraulic & Pneumatic Systems	6		
AIT135	Industrial Robotics	4	IET228	
	Total	**29**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
MST121	Blueprint Reading	2		
CSE122	Programming Logic & Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
	Total	**10**		
	TOTAL CREDIT HOURS	**39**		

^Based upon SSC placement**.**
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in one year.

AUTOMATION AND ROBOTICS TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
MST221	Mechanical Drive Components	3	
MST121	Blueprint Reading	2	
CSE122	Programming Logic & Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		13	
Second Semester			
IET228	Introduction to Robotics	2	
IET223	Computer Numerical Control	4	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
		10	
Third Semester			
AIT221	Advanced CNC Programming	3	IET223 **or** ARL121 **or** ARL122
EET227	PLCs and Industrial Controls I	3	EST130 **or** EET120
MST134	Hydraulic & Pneumatic Systems	6	
AIT135	Industrial Robotics	4	IET228
		16	
	TOTAL CREDITS	**39**	

^Based upon SSC placement.
^^To promote student success, this course should be taken in the first semester.
++Requires a “C” or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

2250

AUTOMOTIVE TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT122	Automotive Systems and Engine Technology	4	AUT121	
AUT124	Vehicle Chassis Systems	4	AUT121	
AUT125	Automotive Electrical and Accessory Systems	4	AUT121	
AUT221	Fuel and Emissions Management Systems	3	AUT125	
AUT222	Engine System Performance Diagnosis	3	AUT125	
AUT223	Advanced Automotive Electronics	3	AUT125	
AUT227	Computerized Vehicle Control	3	AUT125	
AUT233	Automotive Diagnostic Applications	2	AUT223	
AUT234	Alternative Fuels and Advanced Automotive Technologies	2	AUT223	
TECHNICAL ELECTIVE: ***2 credit hours minimum***				
	See Technical Elective list.	*2-5*	*Check for prerequisites*	
	Total	**30-33**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
AUT121	Automotive Technical Skills	2		
AUT123	Engine Diagnosis and Major Service	4	AUT121	
AUT126	Automotive HVAC Systems	2	AUT121	
AUT225	Automotive Drivetrain I	3	AUT121	
AUT226	Automotive Drivetrain II	3	AUT121	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092) **or** Proficiency	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
PHL122	Ethics	3		
	Total	**30**		
	TOTAL CREDIT HOURS	**60-63**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
Ω MTH125 College Algebra should be taken by students planning to transfer to a four-year university.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

AUTOMOTIVE TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
AUT121	Automotive Service Skills	2	
AUT122	Automotive Systems and Engine Applications	4	AUT121
AUT123	Engine Diagnosis and Major Service	4	AUT121
ENG124	College Composition^	3	ENG011 **or** Proficiency
		14	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
AUT126	Automotive HVAC Systems	2	AUT121
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092) **or** Proficiency
PHL122	Ethics	3	
		16	
Third Semester			
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT222	Engine Systems performance Diagnosis	3	AUT125
AUT223	Advanced Automotive Electronics	3	AUT125
AUT227	Computerized Vehicle Control	3	AUT125
BUS122	Basic Economics^	3	IDS102 **or** Proficiency
		15	
Fourth Semester			
AUT225	Automotive Drivetrain I	3	AUT121
AUT226	Automotive Drivetrain II	3	AUT121
AUT233	Automotive Diagnostics Applications	2	AUT223
AUT234	Alternative Fuels and Advanced Automotive Systems	2	AUT223
ENG221	Technical Report Writing	3	ENG124
*Technical Elective***		2-5	*Check for prerequisites*
		15-18	
	TOTAL CREDITS	**60-63**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
Ω MTH125 College Algebra should be taken by students planning to transfer to a four-year university.
****See Technical Elective list page.

TECHNICAL ELECTIVES: *Two (2) credit hours minimum*				**2250**
Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
AUT130	Automotive Safety and Shops Standards	2		
AUT131	Automotive Detailing Business Practices	2		
AUT132	Automotive Exterior Detailing	3		
AUT133	Automotive Interior Detailing	2	AUT132	
AUT134	Automotive Under-Hood and Under-Car Detailing	2	AUT132	
AUT135	Advanced Automotive Detailing Techniques	3	AUT132	
AUT136	Practical Automotive Detailing Applications	2	AUT132	
AUT137	ASE Test Preparation	2		
AUT138	Applied Automotive Principles	4		
AUT141	Vehicle Chassis Systems	2		
AUT142	Auto Electrical Systems Toyota	2		
AUT143	Auto HVAC Systems Toyota 750	1		
AUT251	Automotive Drivetrains I	1		
AUT252	Automotive Drivetrains II	1		
AUT253	Computerized Vehicle Controls	2		
AUT171	Introduction to Honda PACT	1		
AUT172	Honda Engine Mechanical	2		
AUT173	Honda Steering and Suspension	1	AUT124	
AUT174	Honda Braking Systems	1	AUT124	
AUT175	Honda Electrical Systems	2	AUT125	
AUT176	Honda HVAC Systems	1	AUT125	
AUT277	Honda Computerized Engine	2	AUT223	
AUT271	Honda Fuel and Emissions System	1	AUT221	
AUT273	Honda Advanced Diagnostic Applications	1	AUT223	
AUT275	Honda Manual Transmissions	1	AUT225	
AUT276	Honda Automatic Transmissions	1	AUT226	
AUT181	Intro to CAT Lift Trucks	1	AUT121	
AUT182	CAT Operator Safety Training	1	AUT121	
AUT183	CAT Service Information System	1	AUT121	
AUT184	CAT Hydraulic Systems	1	AUT121	
AUT185	CAT Internal Combustion Engine	2	AUT121	
AUT186	CAT Masts and Lift Mechanisms	1	AUT121	
AUT187	CAT Electrical Systems	3	AUT121	
AUT188	CAT Steering Systems	1	AUT121	
AUT189	CAT Braking Systems	1	AUT121	
AUT281	CAT Differentials and Front Axles	1	AUT121	
AUT282	CAT Transmissions	2	AUT121	
AUT283	CAT Fuel Systems (LP, Gasoline)	2	AUT121	
AUT254	Automotive Aftermarket Vehicle Interior Modifications	3	AUT125	
AUT255	Automotive Aftermarket Vehicle Exterior Modifications	3	AUT125	
AUT256	Automotive Aftermarket Vehicle Powertrain Modifications	3	AUT123	
AUT257	Automotive Aftermarket Vehicle Chassis Modifications	3	AUT124	
AUT191	Automotive CO-OP 1	2		
AUT192	Automotive CO-OP 2	2		
AUT193	Automotive CO-OP 3	2		
AUT194	Automotive CO-OP 4	2		
AUT224	Auto Diesel Systems	2	AUT121	
AUT228	Auto Service Management	2		
AUT230	Technical Project	2		
TOY101	Introduction to Toyota T-TEN	3		
TOY102	Toyota Electrical Systems I	5	TOY101	
TOY103	Toyota Steering, Suspension, and Handling	5	TOY102	
TOY104	Toyota Engine Diagnosis and Repair	5	TOY101	
TOY105	Toyota Engine Controls I	5	TOY104	
TOY106	Toyota Manual Transmissions and Drivetrains	5	TOY102	
TOY201	Toyota Electrical Systems II	5	TOY102	
TOY202	Toyota Automotive Braking Systems	5	TOY201	
TOY203	Toyota HVAC Systems	5	TOY201	
TOY204	Toyota Engine Controls II	5	TOY105	
TOY205	Toyota Automatic Transmissions	5	TOY204	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

2251

GENERAL MOTORS ASEP PROGRAM

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT122	Automotive Systems and Engine Technology	4	AUT121	
AUT124	Vehicle Chassis Systems	4	AUT121	
AUT125	Automotive Electrical and Accessory Systems	4	AUT121	
AUT221	Fuel and Emissions Management Systems	3	AUT125	
AUT222	Engine System Performance Diagnosis	3	AUT125	
AUT223	Advanced Automotive Electronics	3	AUT125	
AUT227	Computerized Vehicle Control	3	AUT125	
AUT191	Automotive CO-OP 1	2		
AUT192	Automotive CO-OP 2	2		
AUT193	Automotive CO-OP 3	2		
TECHNICAL ELECTIVE: ***2 credit hours minimum***				
	See Technical Elective list.	*2*	*Check for prerequisites*	
	Total	**32**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
AUT121	Automotive Technical Skills	2		
AUT123	Engine Diagnosis and Major Service	4	AUT121	
AUT126	Automotive HVAC Systems	2	AUT121	
AUT225	Automotive Drivetrain I	3	AUT121	
AUT226	Automotive Drivetrain II	3	AUT121	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092) **or** Proficiency	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
PHL122	Ethics	3		
	Total	**30**		
	TOTAL CREDIT HOURS	**62**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
Ω MTH 125 College Algebra should be taken by students planning to transfer to a four-year university.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

GENERAL MOTORS ASEP PROGRAM

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
AUT121	Automotive Service Skills	2	
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
ENG124	College Composition^	3	ENG 011 **or** Proficiency
MTH106	Math for Technology^ Ω	3	(MTH 091 and MTH 092) **or** Proficiency
		13	
Second Semester			
AUT122	Automotive Systems and Engine Applications	4	AUT121
AUT123	Engine Diagnosis and Major Service	4	AUT121
AUT191	Automotive CO-OP 1	2	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency
		13	
Summer Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT126	Automotive HVAC Systems	2	AUT121
*Technical Elective***		2	*Check for prerequisites*
		8	
Third Semester			
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT222	Engine Systems performance Diagnosis	3	AUT125
AUT223	Advanced Automotive Electronics	3	AUT125
AUT192	Automotive CO-OP 2	2	
PHL122	Ethics	3	
		14	
Fourth Semester			
AUT227	Computerized Vehicle Control	3	AUT125
AUT225	Automotive Drivetrain I	3	AUT121
AUT226	Automotive Drivetrain II	3	AUT121
AUT193	Automotive CO-OP 3	2	
ENG221	Technical Report Writing	3	ENG124
		14	
	TOTAL CREDITS	**62**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

Ω MTH 125 College Algebra should be taken by students planning to transfer to a four-year university.

******See Technical Elective list page.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

2257

COMPREHENSIVE AUTOMOTIVE TECHNOLOGY CERTIFICATE

Effective Summer 2014

The Stark State College *Comprehensive Automotive Technology Certificate* contains the core automotive courses that are in the automotive technology associate degree program and are structured to prepare students for a productive career in the automotive service and repair industry.

In our two state-of-the-art automotive facilities, students use the latest tools and diagnostic equipment to apply practical service techniques to our fleet of late-model vehicles. This builds hands-on skills that can be applied immediately upon graduation.

The curriculum is accredited by the National Automotive Technicians Education Foundation (NATEF) preparing students to pursue Automotive Service Excellence (ASE) certification. Students successfully completing this course of study will receive a *Comprehensive Automotive Technology Certificate* from Stark State College.

Students desiring to obtain an associate's degree can chose to add the academic courses that are listed on the Automotive Technology Program (2250) advising sheet.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^	1	*Take first semester*	
AUT121	Automotive Technical Skills	2		
AUT122	Automotive Systems and Engine Technology	4	AUT121	
AUT123	Engine Diagnosis and Major Service	4	AUT121	
AUT124	Vehicle Chassis Systems	4	AUT121	
AUT125	Automotive Electrical and Accessory Systems	4	AUT121	
AUT126	Automotive HVAC Systems	2	AUT121	
AUT221	Fuel and Emissions Management Systems	3	AUT125	
AUT222	Engine System Performance Diagnosis	3	AUT125	
AUT223	Advanced Automotive Electronics	3	AUT125	
AUT225	Automotive Drivetrain I	3	AUT121	
AUT226	Automotive Drivetrain II	3	AUT121	
AUT227	Computerized Vehicle Control	3	AUT125	
AUT233	Automotive Diagnostic Applications	2	AUT223	
AUT427	Alternative Fuels and Advance Automotive Technologies	2	AUT223	
	TOTAL CREDIT HOURS	**43**		

^To promote student success, this course should be taken in the first semester.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below gives a suggested scheduling option. Some courses can be scheduled in other semesters depending upon course availability and advisor's recommendation.

COMPREHENSIVE AUTOMOTIVE TECHNOLOGY CERTIFICATE

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^	1	*Take first semester*
AUT121	Automotive Technical Skills	2	
AUT122	Automotive Systems and Engine Technology	4	AUT121
AUT123	Engine Diagnosis and Major Service	4	AUT121
		11	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
AUT126	Automotive HVAC Systems	2	AUT121
		10	
Third Semester			
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT222	Engine System Performance Diagnosis	3	AUT125
AUT223	Advanced Automotive Electronics	3	AUT125
AUT227	Computerized Vehicle Control	3	AUT125
		12	
Fourth Semester			
AUT 225	Automotive Drivetrain I	3	AUT 121
AUT 226	Automotive Drivetrain II	3	AUT 121
AUT 233	Automotive Diagnostic Applications	2	AUT 223
AUT 427	Alternative Fuels and Advance Automotive Technologies	2	AUT 223
		10	
	TOTAL CREDITS	**43**	

^To promote student success, this course should be taken in the first semester.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

2256

1-YEAR AUTOMOTIVE TECHNOLOGY

Effective Summer 2014

The Stark State College *1-Year Automotive Technology Certificate* contains the core automotive courses that are in the automotive technology associate degree program and are structured to quickly prepare students for a productive career in the automotive service and repair industry.

In our two state-of-the-art automotive facilities, students use the latest tools and diagnostic equipment to apply practical service techniques to our fleet of late-model vehicles. This builds hands-on skills that can be applied immediately upon graduation.

The curriculum is accredited by the National Automotive Technicians Education Foundation (NATEF) preparing students to pursue Automotive Service Excellence (ASE) certification. Students successfully completing this course of study will receive a *1-Year Automotive Technology Certificate* from Stark State College.

Students desiring to obtain an associate's degree can chose to add the academic courses that are listed on the Automotive Technology Program (2250) advising sheet.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^	1	*Take first semester*	
AUT121	Automotive Technical Skills	2		
AUT122	Automotive Systems and Engine Technology	4	AUT121	
AUT123	Engine Diagnosis and Major Service	4	AUT121	
AUT124	Vehicle Chassis Systems	4	AUT121	
AUT125	Automotive Electrical and Accessory Systems	4	AUT121	
AUT126	Automotive HVAC Systems	2	AUT121	
AUT221	Fuel and Emissions Management Systems	3	AUT125	
AUT222	Engine System Performance Diagnosis	3	AUT125	
AUT223	Advanced Automotive Electronics	3	AUT125	
AUT225	Automotive Drivetrain I	3	AUT121	
AUT226	Automotive Drivetrain II	3	AUT121	
AUT227	Computerized Vehicle Control	3	AUT125	
AUT233	Automotive Diagnostic Applications	2	AUT223	
	TOTAL CREDIT HOURS	**41**		

^To promote student success, this course should be taken in the first semester.

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

1-YEAR AUTOMOTIVE TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^	1	*Take first semester*
AUT121	Automotive Technical Skills	2	
AUT122	Automotive Systems and Engine Technology	4	AUT121
AUT123	Engine Diagnosis and Major Service	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
		15	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT126	Automotive HVAC Systems	2	AUT121
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT223	Advanced Automotive Electronics	3	AUT125
AUT227	Computerized Vehicle Control	3	AUT125
		15	
Third Semester			
AUT222	Engine System Performance Diagnosis	3	AUT125
AUT225	Automotive Drivetrain I	3	AUT121
AUT226	Automotive Drivetrain II	3	AUT121
AUT233	Automotive Diagnostic Applications	2	AUT223
		11	
	TOTAL CREDITS	**41**	

^To promote student success, this course should be taken in the first semester.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4200

CIVIL ENGINEERING TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials & Construction Methods	3		
CET122	Architectural Drafting I	3		
DET125	Basic AutoCAD	3		
CET125	Soil Mechanics	3	MTH135 **and** Co-MET124	
CET222	Concrete & Asphalt Testing	3	MTH135 **and** CET121	
CET223	Structural Design I	3	MET124	
CET236	Global Positioning Systems	3	CET227	
CET226	Estimating	3	CET121 **and** ITD122 **and** MTH135 **and** (CET122 or DET125 or CET237)	
CET227	Surveying I	3	Co-MTH135	
CET228	Surveying II	3	CET227	
CET232	Land Planning & Design	3	CET227 **and** (CET122 or CET124 or DET125)	
CET238	Tech Project – Civil Engineering	3	CET223 **or** CET228	
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
	Total	**40**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM123	Small Group Communication	3	ENG124	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
	*Select one (1) Arts & Humanities Elective from list below.**	3	*Check for pre-requisites*	
	Total	**29**		
	TOTAL CREDIT HOURS	**69**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

CIVIL ENGINEERING TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
CET121	Building Materials & Construction Methods	3	
CET122	Architectural Drafting I	3	
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		18	
Second Semester			
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
CET125	Soil Mechanics	3	MTH135 **and** Co-MET124
DET125	Basic AutoCAD	3	
PHY121	College Physics I with Algebra (lab)	4	MTH135
		14	
Third Semester			
ENG221	Technical Report Writing	3	ENG124
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
CET227	Surveying I	3	Co-MTH135
CET223	Structural Design I	3	MET124
CET222	Concrete & Asphalt Testing	3	MTH135 **and** CET121
CET232	Land Planning & Design	3	CET227 **and** (CET122 or CET124 or DET125)
		19	
Fourth Semester			
COM123	Small Group Communication	3	ENG124
CET226	Estimating	3	CET121 **and** ITD122 **and** MTH135 **and** (CET122 or DET125 or CET237)
CET238	Tech Project – Civil Engineering	3	CET223 **or** CET228
CET236	Global Positioning Systems	3	CET227
CET228	Surveying II	3	CET227
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		18	
	TOTAL CREDITS	**69**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4201

CIVIL ENGINEERING TECHNOLOGY – ARCHITECTURAL MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials & Construction Methods	3		
CET122	Architectural Drafting I	3		
CET123	Architectural Drafting II	3	Co-CET121 **and** CET122	
CET223	Structural Design I	3	MET124	
CET225	Sustainable Building Service Systems	3	CET121 **and** MTH135	
CET226	Estimating	3	CET121 **and** ITD122 **and** MTH135 **and** (CET122 or DET125 or CET237)	
CET227	Surveying I	3	Co-MTH135	
CET232	Land Planning and Design	3	CET227 **and** (CET122 or CET124 or DET125)	
CET233	Architectural Design	3	CET122 **and** CET123	
CET234	A/E CAD	2	CET121 **and** CET122 **and** DET125	
CET235	Construction Management, Job Cost & Safety	3	CET121 **and** ITD122	
DET125	Basic AutoCAD	3		
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
	Total	**39**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**29**		
	TOTAL CREDIT HOURS	**68**		

^Based upon SSC placement score

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

CIVIL ENGINEERING TECHNOLOGY – ARCHITECTURAL MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
CET121	Building Materials & Construction Methods	3	
CET122	Architectural Drafting I	3	
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		18	
Second Semester			
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
CET123	Architectural Drafting II	3	Co-CET121 **and** CET122
DET125	Basic AutoCAD	3	
PHY121	College Physics I with Algebra (lab)	4	MTH135
		14	
Third Semester			
ENG221	Technical Report Writing	3	ENG124
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
CET227	Surveying I	3	Co-MTH135
CET223	Structural Design I	3	MET124
CET232	Land Planning & Design	3	CET227 **and** (CET122 or CET124 or DET125)
CET235	Construction Management, Job Cost & Safety	3	CET121 **and** ITD122
		19	
Fourth Semester			
COM123	Small Group Communication	3	ENG124
CET226	Estimating	3	CET121 **and** ITD122 **and** MTH135 **and** (CET122 or DET125 or CET237)
CET225	Sustainable Building Service Systems	3	CET121 **and** MTH135
CET233	Architectural Design	3	CET121 **and** CET123
CET234	A/E CAD	2	CET121 **and** CET122 **and** DET125
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		17	
	TOTAL CREDITS	**68**	

^Based upon SSC placement score

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4204

CIVIL ENGINEERING TECHNOLOGY – CONSTRUCTION MANAGEMENT MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials & Construction Methods	3		
CET237	Interpreting Construction Documents	2		
CET239	Building Code Applications	2	CET121 **or** CET237 **or** CET122	
CET125 **or** CET222	Soil Mechanics **or** Concrete & Asphalt Testing	3 3	MTH135 **and** Co-MET124 CET121 **and** MTH135	
CET223	Structural Design I	3	MET124	
CET225	Sustainable Building Service Systems	3	CET121 **and** MTH135	
CET226	Estimating	3	CET121 **and** ITD122 **and** MTH135 **and** (CET122 or DET125 or CET237)	
CET227	Surveying I	3	Co-MTH135	
CET235	Construction Management, Job Cost & Safety	3	CET121 **and** ITD122	
CET236	Global Positioning System	3	CET227	
CET232	Land Planning & Design	3	CET227 **and** (CET122 or CET124 or DET125)	
DET125	Basic AutoCAD	3		
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
	Total	**38**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**29**		
	TOTAL CREDIT HOURS	**67**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

CIVIL ENGINEERING TECHNOLOGY – CONSTRUCTION MANAGEMENT MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
CET121	Building Materials & Construction Methods	3	
CET237	Interpreting Construction Documents	2	
DET125	Basic AutoCAD	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		17	
Second Semester			
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
CET125	Soil Mechanics	3	MTH135 **and** Co-MET124
or	**or**		
CET222	Concrete & Asphalt Testing	3	CET121 **and** MTH135
*Arts & Humanities Elective**		3	*Check for pre-requisites*
PHY121	College Physics I with Algebra (lab)	4	MTH135
		14	
Third Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
CET227	Surveying I	3	Co-MTH135
CET223	Structural Design I	3	MET124
CET232	Land Planning & Design	3	CET227 **and** (CET122 or CET124 or DET125)
CET235	Construction Management, Job Cost & Safety	3	CET121 **and** ITD122
		19	
Fourth Semester			
ENG221	Technical Report Writing	3	ENG124
COM123	Small Group Communication	3	ENG124
CET225	Sustainable Building Service Systems	3	CET121 and MTH135
CET239	Building Code Applications	2	CET121 **or** CET237 **or** CET122
CET226	Estimating	3	CET121 **and** ITD122 **and** MTH135 **and** (CET122 or DET125 or CET237)
CET236	Global Positioning System	3	CET227
		17	
	TOTAL CREDITS	**67**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4000

DESIGN ENGINEERING TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET121	Engineering Drawing	3		
DET122	Descriptive Geometry	3	DET121	
DET124	Working Drawings	3	DET121 **and** Co-DET125	
DET125	Basic AutoCAD	3		
DET223	Kinematics	3	PHY121	
DET226	Geometric Dimensioning and Tolerancing	2	DET124	
MET226	Technical Project - Mechanical and Design	2	SSC101 **and** (DET125 or DET131)	
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
MET225 **or** AIT122	Manufacturing Processes **or** Machine Tools	3		
MET228	Machine Design	4	MET124	
TECHNICAL ELECTIVES: ***6 credit hours minimum***				
DET126	Customizing AutoCAD	3	DET125	
DET230	Advanced AutoCAD (Inventor)	3	DET125	
DET131	Pro Engineer	3	DET121	
	Total	**36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
PHY121	College Physics I with Algebra	4	MTH135	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below**	3	*Check for pre-requisites*	
	Total	**29**		
	TOTAL CREDIT HOURS	**65**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

DESIGN ENGINEERING TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
DET121	Engineering Drawing	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
DET125	Basic AutoCAD	3	
		18	
Second Semester			
DET122	Descriptive Geometry	3	DET121
MET225/AIT122	Manufacturing Processes or Machine Tools	3	
PHY121	College Physics I with Algebra	4	MTH135
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
		14	
Third Semester			
DET226	Geometric Dimensioning & Tolerancing	2	DET124
COM123	Small Group Communication	3	ENG124
DET124	Working Drawings	3	DET121 **and** Co-DET125
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
*Technical Elective***		3	*Check for pre-requisites*
DET223	Kinematics	3	PHY121
		18	
Fourth Semester			
MET226	Technical Project - Mechanical and Design	2	SSC101 **and** (DET125 or DET131)
MET228	Machine Design	4	MET124
ENG221	Technical Report Writing	3	ENG124
*Arts & Humanities Elective**		3	*Check for pre-requisites*
*Technical Elective***		3	*Check for pre-requisites*
		15	
	TOTAL CREDITS	**65**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122
******Technical Electives: DET126, DET230, DET131

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4100

ELECTRICAL ENGINEERING TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130	
EET125	Circuit Manufacturing Techniques	1	EET120	
EET126	Electrical Machines	4	Co-EET122	
EET128	NEC & Electrical Systems Design	2	EET122	
EET226	Transmission & Distribution	3	EET122	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
EET228	PLCs and Industrial Controls II	3	EET227	
EET232	Industrial Electronics	4	EET123	
EET233	Technical Project – Electrical	1	EET123 **and** EET227	
DET125	Basic AutoCAD	3		
	Total	**36**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and (**ITD100 or Proficiency)	
CSE229	Visual Basic Development	3	CSE122	
EET263	Industrial Sensors and Advanced Applications	2	EET120 **or** EST130	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**69**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ELECTRICAL ENGINEERING TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and (**ITD100 or Proficiency)
EET120	DC Circuit Analysis	4	Co-MTH135
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
		16	
Second Semester			
EET122	AC Circuit Analysis	4	EET120
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
EET126	Electrical Machines	4	Co-EET122
PHY121	College Physics I with Algebra (lab)	4	MTH135
		16	
Third Semester			
DET125	Basic AutoCAD	3	
EET128	NEC & Electrical Systems Design	2	EET122
COM123	Small Group Communication	3	ENG124
EET227	PLCs and Industrial Controls I	3	EET120 or EST130
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
ENG221	Technical Report Writing	3	ENG124
CSE229	Visual Basic Development	3	CSE122
		20	
Fourth Semester			
EET226	Transmission & Distribution	3	EET122
EET228	PLCs and Industrial Controls II	3	EET227
EET232	Industrial Electronics	4	EET123
EET233	Technical Project – Electrical	1	EET123 **and** EET227
*Arts & Humanities Elective**		3	*Check for pre-requisites*
EET263	Industrial Sensors & Adv. Applications	2	EET120 **or** EST130
EET125	Circuit Manufacturing Techniques	1	EET120
		17	
	TOTAL CREDITS	**69**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4101

ELECTRICAL ENGINEERING TECHNOLOGY – ELECTRO-MECHANICAL MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130	
EET126	Electrical Machines	4	Co-EET122	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
MET123	Material Science	2		
MET225	Manufacturing Processes	3		
MET222	Fluid Power	4	MET124	
MET227	Thermodynamics and Heat Transfer	3	MTH135 **and** PHY121	
DET125	Basic AutoCAD	3		
	Total	**38**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
EET263	Industrial Sensors and Advanced Applications	2	EET120 **or** EST130	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from list below**	3	*Check for pre-requisites*	
	Total	**30**		
	TOTAL CREDIT HOURS	**68**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ELECTRICAL ENGINEERING TECHNOLOGY – ELECTRO-MECHANICAL MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
EET120	DC Circuit Analysis	4	Co-MTH135
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
		16	
Second Semester			
EET122	AC Circuit Analysis	4	EET120
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
EET126	Electrical Machines	4	Co-EET122
PHY121	College Physics I with Algebra (lab)	4	MTH135
		16	
Third Semester			
MET123	Material Science	2	
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
ENG221	Technical Report Writing	3	ENG124
DET125	Basic AutoCAD	3	
		18	
Fourth Semester			
COM123	Small Group Communication	3	ENG124
MET222	Fluid Power	4	MET124
MET225	Manufacturing Processes	3	
MET227	Thermodynamics and Heat Transfer	3	MTH135 **and** PHY121
EET263	Industrial Sensors and Advanced Applications	2	EET120 **or** EST130
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		18	
	TOTAL CREDITS	**68**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4404

ELECTRICAL MAINTENANCE TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices & Circuits	4	EET120 or EST130	
MST121	Blueprint Reading	2		
MST221	Mechanical Drive Components	3		
EST129	Switchgear, Transformers & Controls	2	EET120	
EET126	Electrical Machines	4	Co-EET122	
EET128	NEC and Electrical Systems Design	2	EET122	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
EET228	PLCs and Industrial Controls II	3	EET227	
EST221	Electrical/Electronic Troubleshooting	3	EET123	
EET125	Circuit Manufacturing Techniques	1	EET120	
TECHNICAL ELECTIVES: ***One (1) course minimum from below.***				
EET232	Industrial Electronics	4	EET123	
EET244	Electronic Telecommunications	3		
IET228	Introduction to Robotics	2		
AIT135	Industrial Robotics	4	IET228	
	Total	**37-39**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
HVC121	HVAC Principles I	3		
MST134	Hydraulic and Pneumatic Systems	6		
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below**	3	*Check for pre-requisites*	
	Total	**34**		
	TOTAL CREDIT HOURS	**71-73**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.
*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ELECTRICAL MAINTENANCE TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
EET120	DC Circuit Analysis	4	Co-MTH135
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
MST121	Blueprint Reading	2	
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		18	
Second Semester			
EET122	AC Circuit Analysis	4	EET120
EET125	Circuit Manufacturing Techniques	1	EET120
EET126	Electrical Machines	4	Co- EET122
MST134	Hydraulic & Pneumatic Systems	6	
ENG124	College Composition^	3	ENG011 **or** Proficiency
		18	
Third Semester			
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
EET128	NEC & Electrical Systems Design	2	EET122
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
MST221	Mechanical Drive Components	3	
ENG221	Technical Report Writing	3	ENG124
*Technical Elective***		2-4	*Check for pre-requisites*
		17-19	
Fourth Semester			
EET228	PLCs and Industrial Controls II	3	EET227
EST129	Switchgear, Transformers & Controls	2	EET120
EST221	Electrical/Electronic Troubleshooting	3	EET123
COM123	Small Group Communication	3	ENG124
HVC121	HVAC Principles I	3	
PHY121	College Physics I with Algebra (lab)	4	MTH135
		18	
	TOTAL CREDITS	**71-73**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.
*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122
******Technical Elective: EET232, EET244, IET228, AIT135

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4405

ELECTRICAL MAINTENANCE TECHNOLOGY – SOLAR ENERGY MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130	
MST121	Blueprint Reading	2		
EST129	Switchgear, Transformers & Controls	2	EET120	
EET126	Electrical Machines	4	Co-EET122	
EET128	NEC & Electrical Systems Design	2	EET122	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
AET221	Solar Thermal Systems	3	AET121	
AET222	Solar Photovoltaic Systems	3	AET221	
EET125	Circuit Manufacturing Techniques	1	EET120	
AET121	Sustainable/AET Sources	3		
	Total	**35**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ENV165	OSHA 10-Hour Construction Safety	1		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
HVC121	HVAC Principles I	3		
MST134	Hydraulic and Pneumatic Systems	6		
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**35**		
	TOTAL CREDIT HOURS	**70**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better
*Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ELECTRICAL MAINTENANCE TECHNOLOGY – SOLAR ENERGY MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
EET120	DC Circuit Analysis	4	Co-MTH135
MST134	Hydraulic and Pneumatic Systems	6	
MST121	Blueprint Reading	2	
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
		18	
Second Semester			
EET125	Circuit Manufacturing Techniques	1	EET120
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
EET126	Electrical Machines	4	Co-EET122
PHY121	College Physics I with Algebra (lab)	4	MTH135
AET121	Sustainable/AET Sources	3	
EET122	AC Circuit Analysis	4	EET120
		20	
Third Semester			
ENV165	OSHA 10-Hour Construction Safety	1	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
AET221	Solar Thermal Systems	3	AET 121
EET128	NEC & Electrical Systems Design	2	EET122
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
EST129	Switchgear, Transformers & Controls	2	EET120
ENG124	College Composition^	3	ENG011 **or** Proficiency
		17	
Fourth Semester			
AET222	Solar Photovoltaic Systems	3	AET221
ENG221	Technical Report Writing	3	ENG124
HVC121	HVAC Principles I	3	
COM123	Small Group Communication	3	ENG124
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		15	
	TOTAL CREDITS	**70**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better

*Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4406

ELECTRICAL MAINTENANCE TECHNOLOGY – WIND TURBINE MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices & Circuits	4	EET120 or EST130	
MST121	Blueprint Reading	2		
MST221	Mechanical Drive Components	3		
EST129	Switchgear, Transformers & Controls	2	EET120	
EET126	Electrical Machines	4	Co-EET122	
EET128	NEC & Electrical Systems Design	2	EET122	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
AIT224	Wind Turbine Energy Systems	3	AIT223	
AIT223	Analysis/Applications of Wind Turbine Energy	3	AET121	
EET125	Circuit Manufacturing Techniques	1	EET120	
AET121	Sustainable/AET Sources	3		
	Total	**38**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ENV165	OSHA 10-Hour Construction Safety	1		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
HVC121	HVAC Principles I	3		
MST134	Hydraulic and Pneumatic Systems	6		
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**35**		
	TOTAL CREDIT HOURS	**73**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ELECTRICAL MAINTENANCE TECHNOLOGY – WIND TURBINE MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
EET120	DC Circuit Analysis	4	Co-MTH135
MST134	Hydraulic and Pneumatic Systems	6	
MST121	Blueprint Reading	2	
MTH135	Precalculus^	5	(MTH093 and MTH094)++
		18	**or** Proficiency
Second Semester			
EET125	Circuit Manufacturing Techniques	1	EET120
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
EET126	Electrical Machines	4	Co-EET122
PHY121	College Physics I with Algebra (lab)	4	MTH135
AET121	Sustainable/AET Sources	3	
EET122	AC Circuit Analysis	4	EET120
		20	
Third Semester			
ENV165	OSHA 10-Hour Construction Safety	1	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
AIT223	Analysis/Applications of Wind Turbine Energy	3	AET 121
EET128	NEC & Electrical Systems Design	2	EET122
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
MST221	Mechanical Drive Components	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
		18	
Fourth Semester			
AIT224	Wind Turbine Energy Systems	3	AIT223
EST129	Switchgear, Transformers & Controls	2	EET120
ENG221	Technical Report Writing	3	ENG124
HVC121	HVAC Principles I	3	
COM123	Small Group Communication	3	ENG124
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		17	
	TOTAL CREDITS	**73**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4575

WIND TURBINE MAINTENANCE TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST121	Blueprint Reading	2		
AET121	Sustainable/Alternative Energy Sources	3		
AIT223	Analysis/Applications of Wind Turbine Energy	3	AET121	
AIT134	Predictive/Preventive Maintenance Technologies I	3	MST221 **and** MST125	
MST221	Mechanical Drive Components	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
AIT222	Predictive/Preventive Maintenance Technologies II	3	AIT134	
AIT224	Wind Turbine Energy Systems	3	AIT223	
	Total	**24**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
EMS123	Emergency Medical Responder	3		
ENV123	OSHA 10-Hour Safety Orientation	1		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
	Total	**12**		
	TOTAL CREDIT HOURS	**36**		

^Based upon SSC placement.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in one year.

WIND TURBINE MAINTENANCE TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
EMS123	Emergency Medical Responder	3	
MST121	Blueprint Reading	2	
AET121	Sustainable/Alternative Energy Sources	3	
MST221	Mechanical Drive Components	3	
ITD122	Computer Applications for Professionals ^	3	ITD100 **or** Proficiency
		15	
Second Semester			
AIT223	Analysis/Applications of Wind Turbine Energy	3	AET121
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
AIT134	Predictive/Preventive Maintenance Technologies I	3	MST221 **and** MST125
		14	
Summer Semester			
AIT224	Wind Turbine Energy Systems	3	AIT223
ENV123	OSHA 10-Hour Safety Orientation	1	
AIT222	Predictive/Preventive Maintenance Technologies II	3	AIT134
		7	
	TOTAL CREDITS	**36**	

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
++ Requires a “C” or better.

Rope and Rescue course is offered as a non-credited course.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

5029

PREDICTIVE AND PREVENTIVE MAINTENANCE TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST121	Blueprint Reading	2		
MST125	Basic Pumps	3		
MST126	Pipefitting Principles and Applications	4		
MST134	Hydraulic & Pneumatic Systems	6		
MST221	Mechanical Drive Components	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
AIT134	Predictive & Preventive Maintenance Technologies I	3	MST221 **and** MST125	
AIT222	Predictive & Preventive Maintenance Technologies II	3	AIT134	
	Total	**28**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
	Total	**9**		
	TOTAL CREDIT HOURS	**37**		

^Based upon SSC placement**.**
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in one year.

PREDICTIVE AND PREVENTIVE MAINTENANCE TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MST121	Blueprint Reading	2	
MST125	Basic Pumps	3	
MST221	Mechanical Drive Components	3	
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
MST126	Pipefitting Principles & Applications	4	
		18	
Second Semester			
AIT134	Predictive & Preventive Maintenance Tech I	3	MST221 and MST125
MST134	Hydraulic & Pneumatic Systems	6	
EST130	Electrical Circuits and Devices ^	4	(MTH093 and MTH094)++ **or** Proficiency
		13	
Summer Semester			
CSE122	Programming Logic & Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
AIT222	Predictive & Preventive Maintenance Tech II	3	AIT134
		6	
	TOTAL CREDITS	**37**	

^Based upon SSC placement**.**
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4150

ELECTRONIC ENGINEERING TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET125	Basic AutoCAD	3		
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130	
EET125	Circuit Manufacturing Techniques	1	EET120	
EET225	Digital Communication & Systems Analysis	3	EET248 **and** EET262	
EET230	Electronic Circuits I	4	EET123	
EET232	Industrial Electronics	4	EET123	
EET235	Technical Project - Electronic	1	EET125 **and** EET230 **and** EET248	
EET248	Workstation Interfacing	4	CSE229 **and** Co-EET262	
EET262	Pulse and Digital Integrated Circuits	4	CSE229 **or** CSE233	
	Total	**36**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE229	Visual Basic Development	3	CSE122	
EET263	Industrial Sensors and Advanced Applications	2	EET120 **or** EST130	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
COM123	Small Group Communication	3	ENG124	
	Select one (1) Arts & Humanities Elective from the list below.	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**69**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ELECTRONIC ENGINEERING TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
EET120	DC Circuit Analysis	4	Co-MTH135
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
DET125	Basic AutoCAD	3	
		19	
Second Semester			
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
EET125	Circuit Manufacturing Techniques	1	EET120
CSE229	Visual Basic Development	3	CSE122
EET122	AC Circuit Analysis	4	EET120
PHY121	College Physics I with Algebra (lab)	4	MTH135
		16	
Third Semester			
EET262	Pulse and Digital Integrated Circuits	4	CSE229 **or** CSE233
EET263	Industrial Sensors and Advanced Applications	2	EET120 **or** EST130
EET248	Workstation Interfacing	4	CSE229 **and** Co-EET262
EET230	Electronic Circuits I	4	EET123
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
		17	
Fourth Semester			
ENG221	Technical Report Writing	3	ENG124
EET225	Digital Communication & Systems Analysis	3	EET248 **and** EET262
EET232	Industrial Electronics	4	EET123
EET235	Technical Project - Electronic	1	EET125 **and** EET230 **and** EET248
COM123	Small Group Communication	3	ENG124
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		17	
	TOTAL CREDITS	**69**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4450

ENVIRONMENTAL, HEALTH, AND SAFETY TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Numbers	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENV121	Regulations & Compliance	3		
ENV123 **or** ENV165	OSHA 10-Hour General Industry Safety **or** OSHA 10-Hour Construction Safety	1		
ENV124	Transportation Haz Mat Training	1		
ENV164	Sustainable Green Building Technology	3		
ENV221	OSHA 40-Hour HAZWOPER	2		
ENV222	Industrial Processes and Pollution Control	3	(CHM121 or CHM141) **and** MTH107	
ENV223	Basic Geology/Hydrology	3	MTH107	
ENV224	Air Sampling, Analysis, and Control	3	(CHM121 or CHM141) **and** ENV121	
ENV225	Solid & Hazardous Waste Sampling, Analysis and Management	3	(CHM121 or CHM141) **and** ENV121	
ENV226	Water Sampling, Analysis, and Control	3	(CHM121 or CHM141) **and** ENV121 **and** ENV223	
ENV228	Health & Safety	3	ENV121	
TECHNICAL ELECTIVES: ***Choose two (2) credit hours minimum from the list below***				
ENV125	Intro to Haz Mat & Waste Management	1		
ENV163	Water/Wastewater Math and Chemistry	2		
ENV169	Radiation Safety	2		
ENV127	Water Certificate Exam Preparation	2		
ENV128	Wastewater Certificate Exam Preparation	2		
ENV230	OSHA 8-Hour Refresher +++	1		
ENV231	OSHA 30-Hour General Industry	2		
ENV236	Environmental, Health and Safety Special Projects	3	ENV121 **and** ITD122 **and** ENV221	
	Total	**30-31**		

NON-TECH Course Numbers	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
MTH107	Industrial Math^	3	(MTH091 and MTH092)+ **or** Proficiency	
GIS123	Maps and Map Reading	3		
GIS231	Geographic Information Systems	3	GIS123	
CHM121	General, Organic & Biological Chemistry I (lab)⅄	4	HS CHM **or** CHM101	
CHM122	General, Organic & Biological Chemistry II (lab)	4	CHM121	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
BIO126	Science, Energy, & the Environment (lab)	4		
	*Select one (1) Arts & Humanities Elective from the list below**	3	*Check for pre-requisites*	
	Total	**34**		
	TOTAL CREDIT HOURS	**64-65**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

+Requires a "B" or better.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

+++ENV230 must be taken by students who wish to complete annual refreshers of their 40-Hour HAZWOPER training.

*Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ENVIRONMENTAL, HEALTH & SAFETY TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH107	Industrial Math^	3	(MTH091 and MTH092)+ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
BIO126	Science, Energy, & the Environment (lab)	4	
CHM121	Gen., Org., & Bio Chemistry I (lab)⍋	4	HS CHM **or** CHM101
ENV123 **or**	OSHA 10-Hour General Industry Safety **or**		
ENV165	OSHA 10-Hour Construction Safety	1	
		16	
Second Semester			
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121
ENV164	Sustainable Green Building Technology	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
ENV221	OSHA 40-Hour HAZWOPER	2	
ENV121	Regulations & Compliance	3	
		15	
Third Semester			
ENV124	Transportation Haz Mat Training	1	
ENV228	Health & Safety	3	ENV121
ENV223	Basic Geology/Hydrology	3	MTH107
ENV224	Air Sampling, Analysis, and Control	3	(CHM121 or CHM141) **and** ENV121
GIS123	Maps and Map Reading	3	
*Arts & Humanities Elective **		3	*Check for pre-requisites*
		16	
Fourth Semester			
GIS231	Geographic Information Systems	3	
ENG221	Technical Report Writing	3	ENG124
ENV225	Solid and Hazardous Waste Sampling, Analysis and Management	3	(CHM121 or CHM141) **and** ENV121
ENV226	Water Sampling, Analysis and Control	3	(CHM121 or CHM141) **and** ENV121 **and** ENV223
ENV222	Industrial Processes and Pollution Control	3	(CHM121 or CHM141) **and** MTH107 *Check for pre-requisites*
*Technical Elective***		2-3	
		17-18	
	TOTAL CREDITS	**64-65**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

+Requires a "B" or better.

⍋Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

+++ENV230 must be taken by students who wish to complete annual refreshers of their 40-Hour HAZWOPER training.

*Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

**Technical Electives: ENV125, ENV163, ENV169, ENV127, ENV128, ENV230, ENV231, ENV236

Additional courses available below for CDL Certificate:

Course Numbers	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CDL121	CDL Class A - Safe Operation & Control++	5	CDL122 and CDL123	
CDL122	CDL Class A - Advanced Operations and Maintenance	6	CDL121 and CDL123	
CDL123	CDL Class A - Behind the Wheel Street	2	CDL121 and CDL122	

++Participation in CDL121 requires a valid Ohio Driver's License with 2 years' driving experience. Must be 18 years of age and show proof of citizenship. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen. (**Cost is $4200.) Students must pass the Ohio CDL Class A Driver's License examination to receive their Class A CDL. The examination is administered at the end of CDL123.**

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4053

SUSTAINABLE/ALTERNATIVE ENERGY TECHNOLOGY

(One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AET121	Sustainable/Alternative Energy Sources	3		
AET122	Analysis/Applications of Sustainable Alternative Energy	3	AET121	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **o**r Proficiency	
MET225	Manufacturing Processes	3		
AET123	Sustainable/Alternative Energy Systems**	3	AET122	
AET124	Sustainable/Alternative Energy Project**	3	AET123	
EET227	PLCs and Industrial Controls I	3	EST130 **or** EET120	
EET128	National Electric Code & Electrical System Design	2	EET122	
	Total	**24**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **o**r Proficiency	
DET125	Basic AutoCAD	3		
DET230	Advanced AutoCAD (Inventor)	3	DET125	
	Total	**11**		
	TOTAL CREDIT HOURS	**35**		

^Based on SSC placement scores
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
**Eight week courses.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

SUSTAINABLE/ALTERNATIVE ENERGY TECHNOLOGY

(One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **o**r Proficiency
AET121	Sustainable/Alternative Energy Sources	3	
		8	
Second Semester			
AET122	Analysis/Apps of Sustainable Alternative Energy	3	AET121
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **o**r Proficiency
MET225	Manufacturing Processes	3	
DET125	Basic AutoCAD	3	
		13	
Third Semester			
AET123	Sustainable/Alternative Energy Systems**	3	AET122
AET124	Sustainable/Alternative Energy Project**	3	AET123
EET227	PLCs and Industrial Controls I	3	EST130 **or** EET120
EET128	National Electric Code & Electrical System Design	2	EET122
DET230	Advanced AutoCAD (Inventor)	3	DET 125
		14	
	TOTAL CREDITS	**35**	

^Based on SSC placement scores
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
**Eight week courses.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4500

HEATING, VENTILATING, AND AIR CONDITIONING TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC121	HVAC Principles I	3		
HVC122	HVAC Principles II	3	Co-HVC121	
HVC222	HVAC Design and Application	3	HVC122	
HVC223	HVAC System Operation & Troubleshooting – Heating	3	HVC122	
HVC224	HVAC System Operation & Troubleshooting – Cooling	3	HVC122	
HVC227	HVAC Field Installation Techniques and Procedures	4	Co-HVC122	
HVC123	Sheet Metal Layout I	3		
HVC226	Sheet Metal Layout II	3	HVC123	
HVC234	HVAC Electrical Systems & Applications^	3	(MTH093 and MTH094)++ **or** Proficiency	
HVC236	Advanced HVAC Electrical Applications	3	HVC234	
MST121	Blueprint Reading	2		
TECHNICAL ELECTIVES: ***6 credit hours minimum***				
HVC237	HVAC Commercial Controls	3		
HVC232	Advanced HVAC Applications	3	HVC222 **and** HVC227	
HVC235	Refrigeration	3	HVC122	
HVC238	Chiller Operations	3	HVC122	
	Total	**39**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
CET121	Building Materials and Construction Methods	3		
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MST126	Pipefitting Principles and Applications	4		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below**	3	*Check for pre-requisites*	
	Total	**31**		
	TOTAL CREDIT HOURS	**70**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

HEATING, VENTILATING, AND AIR CONDITIONING TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
HVC121	HVAC Principles I	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
HVC123	Sheet Metal Layout I	3	
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		17	
Second Semester			
MST121	Blueprint Reading	2	
ENG124	College Composition^	3	ENG011 **or** Proficiency
HVC122	HVAC Principles II	3	Co-HVC121
HVC226	Sheet Metal Layout II	3	HVC123
HVC227	HVAC Field Installation Techniques/Procedures	4	Co-HVC122
HVC234	HVAC Electrical Systems & Applications^	3	(MTH093 and MTH094)++ **or** Proficiency
		18	
Third Semester			
CET121	Building Materials and Construction Methods	3	
MST126	Pipefitting Principles & Applications	4	
HVC222	HVAC Design and Application	3	HVC122
HVC223	HVAC System Operation/Troubleshooting-Heating	3	HVC122
HVC224	HVAC System Operation/Troubleshooting-Cooling	3	HVC122
COM123	Small Group Communication	3	ENG124
		19	
Fourth Semester			
HVC236	Advanced HVAC Electrical Applications	3	HVC234
ENG221	Technical Report Writing	3	ENG124
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)
*Technical Electives***		6	*Check for pre-requisites*
		16	
	TOTAL CREDITS	**70**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
***Arts & Humanities Elective**: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122
****Technical Elective**: HVC232, HVC235, HVC237, HVC238

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4501

HEATING, VENTILATING, AND AIR CONDITIONING TECHNOLOGY

(One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC121	HVAC Principles I	3		
HVC122	HVAC Principles II	3	Co-HVC121	
HVC234	HVAC Electrical Systems & Applications^	3	(MTH093 and MTH094)++ **or** Proficiency	
HVC223	HVAC System Operation and Troubleshooting – Heating	3	HVC122	
HVC224	HVAC System Operation and Troubleshooting – Cooling	3	HVC122	
HVC227	HVAC Field Installation Techniques and Procedures	4	Co-HVC122	
HVC123	Sheet Metal Layout I	3		
	Total	**22**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
CET121	Building Materials and Construction Methods	3		
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENV231	OSHA 30-Hour General Industry	2		
	Total	**9**		
	TOTAL CREDIT HOURS	**31**		

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

HEATING, VENTILATING, AND AIR CONDITIONING TECHNOLOGY

(One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
HVC121	HVAC Principles I	3	
HVC123	Sheet Metal Layout I	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
ENV231	OSHA 30-Hour General Industry	2	
		12	
Second Semester			
CET121	Building Materials and Construction Methods	3	
HVC122	HVAC Principles II	3	Co-HVC121
HVC227	HVAC Field Installation Techniques/Procedures	4	Co-HVC122
HVC234	HVAC Electrical Systems & Applications^	3	(MTH093 and MTH094)++ **or** Proficiency
		13	
Summer Semester			
HVC223	HVAC System Operation/Troubleshooting – Heating	3	HVC122
HVC224	HVAC System Operation/Troubleshooting – Cooling	3	HVC122
		6	
	TOTAL CREDITS	**31**	

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4050

MECHANICAL ENGINEERING TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MET123	Material Science	2		
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
MET222	Fluid Power	4	MET124	
MET223	Dynamics	2	MET124	
MET225 **or** AIT122	Manufacturing Processes **or** Machine Tools	3		
MET226	Technical Project - Mechanical and Design	2	SSC101 **and** (DET125 or DET131)	
MET227	Thermodynamics and Heat Transfer	3	MTH135 **and** PHY121	
MET228	Machine Design	4	MET124	
DET121	Engineering Drawing	3		
DET125 **or** DET131	Basic AutoCAD **or** Pro Engineer	3	DET121	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094) **or** Proficiency++	
	Total	**36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below**	3	*Check for pre-requisites*	
	Total	**29**		
	TOTAL CREDIT HOURS	**65**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MECHANICAL ENGINEERING TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MET123	Material Science	2	
DET121	Engineering Drawing	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		17	
Second Semester			
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
MET225 **or** AIT122	Manufacturing Processes **or** Machine Tools	3	
DET125 **or** DET131	Basic AutoCAD **or** Pro Engineer	3	DET121
PHY121	College Physics I with Algebra (lab)	4	MTH135
		14	
Third Semester			
COM123	Small Group Communication	3	ENG124
MET228	Machine Design	4	MET124
MET221	Advanced Strength of Materials	2	MET124
MET222	Fluid Power	4	MET124
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
		17	
Fourth Semester			
MET223	Dynamics	2	MET124
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
MET227	Thermodynamics and Heat Transfer	3	MTH135 **and** PHY121
MET226	Technical Project - Mechanical and Design	2	SSC101 **and** (DET125 or DET131)
ENG221	Technical Report Writing	3	ENG124
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		17	
	TOTAL CREDITS	**65**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

*****Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4051

MECHANICAL ENGINEERING TECHNOLOGY – FUEL CELL MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
MET229	Introduction to Alternative Energy and Fuel Cells	3		
MET222	Fluid Power	4	MET124	
MET230	Analysis & Applications of Types of Fuel Cells	3	MET229	
MET225 **or** AIT122	Manufacturing Processes **or** Machine Tools	3		
MET231	Fuel Cell Systems	3	MET230	
MET227	Thermodynamics and Heat Transfer	3	MTH135 **and** PHY121	
MET232	Fuel Cell Project	3	MET231	
DET230	Advanced AutoCAD (Inventor)	3	DET125	
DET125	Basic AutoCAD	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
	Total	**36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221 **or** MTH223	Concepts of Calculus^ **or** Analytical Geometry and Calculus I^	3-4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
CHM141	General Chemistry I (lab)✦	5	HS CHM **or** CHM101	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
	*Select one (1) Arts & Humanities Elective from the list below**	3	*Check for pre-requisites*	
	Total	**33-34**		
	TOTAL CREDIT HOURS	**69-70**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

✦Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MECHANICAL ENGINEERING TECHNOLOGY – FUEL CELL MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MET229	Introduction to Alternative Energy and Fuel Cells	3	
CHM141	General Chemistry I (lab)⅄	5	HS CHM **or** CHM101
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
DET125	Basic AutoCAD	3	
		20	
Second Semester			
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
MET230	Analysis and Applications of Types of Fuel Cells	3	MET229
CSE122	Programming Logic & Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
PHY121	College Physics I with Algebra (lab)	4	MTH135
		14	
Third Semester			
COM123	Small Group Communication	3	ENG124
MET222	Fluid Power	4	MET124
MET231	Fuel Cell Systems	3	MET230
DET230	Advanced AutoCAD (Inventor)	3	DET125
MTH221 **or** MTH223	Concepts of Calculus^ **or** Analytical Geo and Calc I^	3-4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
		16-17	
Fourth Semester			
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **o**r Proficiency
MET227	Thermodynamics and Heat Transfer	3	MTH135 **and** PHY121
MET232	Fuel Cell Project	3	MET231
ENG221	Technical Report Writing	3	ENG124
MET225 **or** AIT122	Manufacturing Processes **or** Machine Tools	3	
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		19	
	TOTAL CREDITS	**69-70**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*****Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4052

FUEL CELL TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET128	National Electric Code & Electrical System Design	2	EET122	
EET227	PLCs and Industrial Controls I	3	EST130 **or** EET120	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
MET225	Manufacturing Processes	3		
MET229	Alternative Energy Sources/Fuel Cells	3		
MET230	Analysis/Applications of Fuel Cells	3	MET229	
MET231	Fuel Cell Systems	3	MET230	
MET232	Fuel Cell Project	3	Co-MET231	
	Total	**24**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
DET125	Basic AutoCAD	3		
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
	Total	**12**		
	TOTAL CREDIT HOURS	**36**		

^ Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

FUEL CELL TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **o**r Proficiency
MET229	Alternative Energy Sources/Fuel Cells	3	
		9	
Second Semester			
MET230	Analysis/Applications of Fuel Cells	3	MET229
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **o**r Proficiency
DET125	Basic AutoCAD	3	
MET225	Manufacturing Processes	3	
		13	
Third Semester			
MET231	Fuel Cell Systems	3	MET230
MET232	Fuel Cell Project	3	Co-MET231
EET227	PLCs and Industrial Controls I	3	EST130 or EET120
EET128	National Electric Code & Electrical System Design	2	EST122
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		14	
	TOTAL CREDITS	**36**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4312

INDUSTRIAL PROCESS OPERATION TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST134	Hydraulic & Pneumatic Systems	6		
MST221	Mechanical Drive Components	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
EET263	Industrial Sensors/Advanced Applications	2	EET120 **or** EST130	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
EET228	PLCs and Industrial Controls II	3	EET227	
ARL234	Gas Compression and Flow Dynamics	3		
ARL239	Large Line Unit Compressor Assembly	3		
PET101	Introduction to the Petroleum Industry	3		
	Total	**30**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
MET123	Material Science	2		
MST121	Blueprint Reading	2		
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**32**		
	TOTAL CREDIT HOURS	**62**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++ Requires a "C" or better.

⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

INDUSTRIAL PROCESS OPERATION TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST121	Blueprint Reading	2	
MST134	Hydraulic & Pneumatic Systems	6	
PET101	Introduction to the Petroleum Industry	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
		16	
Second Semester			
MET123	Material Science	2	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
ARL234	Gas Compression and Flow Dynamics	3	
ARL239	Large Line Unit Compressor Assembly	3	
MST221	Mechanical Drive Components	3	
		14	
Third Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
EET228	PLCs and Industrial Controls II	3	EET227
		17	
Fourth Semester			
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)
ENG221	Technical Report Writing	3	ENG124
COM123	Small Group Communication	3	ENG124
EET263	Industrial Sensors/Advanced Applications	2	EET120 **or** EST130
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		15	
	TOTAL CREDITS	**62**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++ Requires a "C" or better.

⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4311

INDUSTRIAL PROCESS OPERATION TECHNOLOGY

(One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST134	Hydraulic & Pneumatic Systems	6		
MST221	Mechanical Drive Components	3		
EET263	Industrial Sensors/Advanced Applications	2	EET120 or EST130	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
ARL234	Gas Compression and Flow Dynamics	3		
ARL239	Large Line Unit Compressor Assembly	3		
PET101	Introduction to the Petroleum Industry	3		
	Total	**27**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
MST121	Blueprint Reading	2		
MET123	Material Science	2		
	Total	**5**		
	TOTAL CREDIT HOURS	**32**		

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

INDUSTRIAL PROCESS OPERATION TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST121	Blueprint Reading	2	
MST134	Hydraulic & Pneumatic Systems	6	
PET101	Introduction to the Petroleum Industry	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++
		16	**or** Proficiency
Second Semester			
MET123	Material Science	2	
EET227	PLCs and Industrial Controls I	3	EET120 or EST130
ARL234	Gas Compression and Flow Dynamics	3	
ARL239	Large Line Unit Compressor Assembly	3	
MST221	Mechanical Drive Components	3	
EET263	Industrial Sensors/Advanced Applications	2	EET120 or EST130
		16	
	TOTAL CREDITS	**32**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4313

PETROLEUM INDUSTRIAL MECHANICS TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST126	Pipefitting Principles and Application	4		
MST134	Hydraulic & Pneumatic Systems	6		
MST121	Blueprint Reading	2		
MST221	Mechanical Drive Components	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
AIT134	Predictive Maintenance Technologies I	3	MST221 **and** MST125	
AIT222	Predictive Maintenance Technologies II	3	AIT134	
AIT130	Structural Maintenance Welding	3		
AIT124	Principles of Rigging	2		
PET101	Introduction to the Petroleum Industry	3		
	Total	**33**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
ENV221	OSHA 40-Hour HAZWOPER	2		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM123	Small Group Communication	3	ENG124	
MST125	Basic Pumps	3		
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**29**		
	TOTAL CREDIT HOURS	**62**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++ Requires a "C" or better.

***** Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

PETROLEUM INDUSTRIAL MECHANICS TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre – and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST125	Basic Pumps	3	
PET101	Introduction to the Petroleum Industry	3	
MST134	Hydraulic & Pneumatic Systems	6	
MST121	Blueprint Reading	2	
AIT124	Principles of Rigging	2	
		17	
Second Semester			
MST126	Pipefitting Principles and Applications	4	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
AIT134	Predictive Maintenance Technologies I	3	MST221 **and** MST125
MST221	Mechanical Drive Components	3	
AIT130	Structural Maintenance Welding	3	
		17	
Third Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
AIT222	Predictive Maintenance Technologies II	3	AIT134
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
ENV221	OSHA 40-Hour HAZWOPER	2	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		15	
Fourth Semester			
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)
ENG221	Technical Report Writing	3	ENG124
COM123	Small Group Communication	3	ENG124
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		13	
	TOTAL CREDITS	**62**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++ Requires a "C" or better.

***** Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4310

PETROLEUM INDUSTRIAL MECHANICS TECHNOLOGY

(One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT124	Principles of Rigging	2		
AIT130	Structural Maintenance Welding	3		
AIT134	Predictive Maintenance Technologies I	3	MST221 **and** MST125	
MST126	Pipefitting Principles and Applications	4		
MST134	Hydraulic & Pneumatic Systems	6		
MST221	Mechanical Drive Components	3		
PET101	Introduction to the Petroleum Industry	3		
	Total	**24**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
MST125	Basic Pumps	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)+ **or** Proficiency	
MST121	Blueprint Reading	2		
	Total	**10**		
	TOTAL CREDIT HOURS	**34**		

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
+ Requires a "B" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

PETROLEUM INDUSTRIAL MECHANICS TECHNOLOGY (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-Requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
PET101	Introduction to the Petroleum Industry	3	
MST125	Basic Pumps	3	
MST134	Hydraulic & Pneumatic Systems	6	
MST121	Blueprint Reading	2	
AIT124	Principles of Rigging	2	
		17	
Second Semester			
MST126	Pipefitting Principles and Applications	4	
MST221	Mechanical Drive Components	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)+ **or** Proficiency
AIT134	Predictive Maintenance Technologies	3	MST221 **and** MST125
AIT130	Structural Maintenance Welding	3	
		17	
	TOTAL CREDITS	**34**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
+ Requires a "B" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4326

PETROLEUM TECHNOLOGY – INSTRUMENTATION ELECTRONICS TECHNICIAN MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST221	Mechanical Drive Components	3		
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
EET228	PLCs and Industrial Controls II	3	EET227	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
PET101	Introduction to the Petroleum Industry	3		
PET102	Introduction to Supervisory Control and Data Acquisition (SCADA)	2		
EET263	Industrial Sensors/Advanced Applications	2	EET120 **or** EST130	
PET132	Petroleum Instrumentation	3		
MST121	Blueprint Reading	2		
ETD224	Engineering CO-OP	4		
IET228	Introduction to Robotics	2		
	Total	**31**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM122	Interpersonal Communication	3		
ENV121	Regulations and Compliance	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
GEO141	Physical Geology	4		
	*Select one (1) Arts & Humanities Elective from the list below**	3	*Check for pre-requisites*	
	Total	**32**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

PETROLEUM TECHNOLOGY – INSTRUMENTATION ELECTRONICS TECHNICIAN MAJOR

Effective Summer 2014

Semester I		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST221	Mechanical Drive Components	3	
ENV121	Regulations and Compliance	3	
PET101	Introduction to the Petroleum Industry	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
PET102	Introduction to Supervisory Control and Data Acquisition (SCADA)	2	
COM122	Interpersonal Communication	3	
		19	
Semester I			
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
PET132	Petroleum Instrumentation	3	
EET263	Industrial Sensors/Advanced Applications	2	EET120 **or** EST130
MST121	Blueprint Reading	2	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
		14	
Summer Semester			
ETD224	Engineering CO-OP	**4**	
Semester III			
GEO141	Physical Geology	4	
EET228	PLCs and Industrial Controls II	3	EET227
CHM101	Introduction to Chemistry^⮝	4	(MTH093 and MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		14	
Semester IV			
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)
IET228	Introduction to Robotics	2	
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		12	
	TOTAL CREDITS	**63**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

⮝Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4325

PETROLEUM INSTRUMENTATION AND ELECTRONICS TECHNICIAN (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST221	Mechanical Drive Components	3		
EET227	PLCs and Industrial Controls I	3	EET120 or EST130	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
PET101	Introduction to the Petroleum Industry	3		
PET102	Introduction to Supervisory Control and Data Acquisition (SCADA)	2		
EET263	Industrial Sensors/Advanced Applications	2	EET120 **or** EST130	
PET132	Petroleum Instrumentation	3		
MST121	Blueprint Reading	2		
ETD224	Engineering CO-OP	4		
	Total	**26**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM122	Interpersonal Communication	3		
ENV121	Regulations and Compliance	3		
ENV123	OSHA 10-Hour Safety Orientation	1		
	Total	**8**		
	TOTAL CREDIT HOURS	**34**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time certificate students who plan to finish in one year.

PETROLEUM INSTRUMENTATION AND ELECTRONICS TECHNICIAN
(One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST221	Mechanical Drive Components	3	
ENV121	Regulations and Compliance	3	
PET101	Introduction to the Petroleum Industry	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
PET102	Introduction to Supervisory Control and Data Acquisition (SCADA)	2	
		16	
Second Semester			
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
PET132	Petroleum Instrumentation	3	
MST121	Blueprint Reading	2	
EET263	Industrial Sensors/Advanced Applications	2	EET120 **or** EST130
ENV123	OSHA 10-Hour Safety Orientation	1	
COM122	Interpersonal Communication	3	
		14	
Summer			
ETD224	Engineering CO-OP	**4**	
	TOTAL CREDITS	**34**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

4315

PETROLEUM TECHNOLOGY – PIPELINE TECHNICIAN MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST221	Mechanical Drive Components	3		
ARL234	Gas Compression and Flow Dynamics	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
PET101	Introduction to the Petroleum Industry	3		
PET102	Introduction to Supervisory Control and Data Acquisition (SCADA)	2		
PET131	Corrosion Basics	3		
PET132	Petroleum Instrumentation	3		
PET135	Basic Pipeline Operations	3		
MST125	Basic Pumps	3		
ETD224	Engineering Co-Op	4		
	Total	**31**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM122	Interpersonal Communication	3		
ENV121	Regulations and Compliance	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
GEO141	Physical Geology (lab)	4		
	*Select one (1) Arts & Humanities Elective from the list below.**	3	*Check for prerequisites*	
	Total	**32**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

**Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

PETROLEUM TECHNOLOGY – PIPELINE TECHNICIAN MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST221	Mechanical Drive Components	3	
ENV121	Regulations and Compliance	3	
PET101	Introduction to the Petroleum Industry	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
PET102	Introduction to Supervisory Control and Data Acquisition (SCADA)	2	
COM122	Interpersonal Communication	3	
		19	
Second Semester			
PET131	Corrosion Basics	3	
PET132	Petroleum Instrumentation	3	
ARL234	Gas Compression and Flow Dynamics	3	
PET135	Basic Pipeline Operations	3	
MST125	Basic Pumps	3	
		15	
Summer Semester			
ETD224	Engineering Co-Op	**4**	
Third Semester			
GEO141	Physical Geology (lab)	4	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG011 or Proficiency
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency
		15	
Fourth Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)
*Arts & Humanities Elective**		3	*Check for prerequisites*
		10	
	TOTAL CREDITS	**63**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Requires a "C" or better.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

**Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4314

SHALENET PIPELINE TECHNICIAN (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST221	Mechanical Drive Components	3		
ARL234	Gas Compression and Flow Dynamics	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
PET101	Introduction to the Petroleum Industry	3		
PET102	Introduction to Supervisory Control and Data Acquisition (SCADA)	2		
PET131	Corrosion Basics	3		
PET132	Petroleum Instrumentation	3		
PET135	Basic Pipeline Operations	3		
MST125	Basic Pumps	3		
	Total	**27**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM122	Interpersonal Communication	3		
ENV121	Regulations and Compliance	3		
	Total	**7**		
	TOTAL CREDIT HOURS	**34**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

SHALENET PIPELINE TECHNICIAN (One-Year Certificate)

Effective Summer 2014

Semester I		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST221	Mechanical Drive Components	3	
ENV121	Regulations and Compliance	3	
PET101	Introduction to the Petroleum Industry	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
PET102	Introduction to Supervisory Control and Data Acquisition (SCADA)	2	
COM122	Interpersonal Communication	3	
		19	
Semester II			
PET131	Corrosion Basics	3	
PET132	Petroleum Instrumentation	3	
ARL234	Gas Compression and Flow Dynamics	3	
PET135	Basic Pipeline Operations	3	
MST125	Basic Pumps	3	
		15	
	TOTAL CREDITS	**34**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++ Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION
ASSOCIATE OF APPLIED SCIENCE

4323

PETROLEUM TECHNOLOGY – PRODUCTION TECHNICIAN MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST221	Mechanical Drive Components	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
PET101	Introduction to the Petroleum Industry	3		
MET123	Material Science	2		
PET131	Corrosion Basics	3		
PET132	Petroleum Instrumentation	3		
PET141	Oil and Gas Lease Operation	3		
PET142	Artificial Lift	3		
MST125	Basic Pumps	3		
ENV121	Regulations and Compliance	3		
AIT124	Principles of Rigging	2		
	TOTAL	**32**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM122	Interpersonal Communication	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
ETD224	Engineering CO-OP	4		
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
GEO141	Physical Geology	4		
ENV221	OSHA 40-Hour HAZWOPER	2		
	*Select one (1) Arts & Humanities Elective from the list below**	3	*Check for pre-requisites*	
	TOTAL	**31**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
*Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

PETROLEUM TECHNOLOGY – PRODUCTION TECHNICIAN MAJOR

Effective Summer 2014

Semester I		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST221	Mechanical Drive Components	3	
ENV121	Regulations and Compliance	3	
PET101	Introduction to the Petroleum Industry	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
MET123	Material Science	2	
		16	
Semester II			
PET131	Corrosion Basics	3	
PET132	Petroleum Instrumentation	3	
PET141	Oil & Gas Lease Operation	3	
PET142	Artificial Lift	3	
COM122	Interpersonal Communication	3	
		15	
Summer Semester			
ETD224	Engineering CO-OP	**4**	
Semester III			
GEO141	Physical Geology	4	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		15	
Semester IV			
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
ENV123	OSHA 40-Hour HAZWOPER	2	
MST125	Basic Pumps	3	
AIT124	Principles of Rigging	2	
*Arts & Humanities Elective**		3	*Check for pre-requisites*
		13	
	TOTAL CREDITS	**63**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
*Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

4335

PRODUCTION TECHNICIAN (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST221	Mechanical Drive Components	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
PET101	Introduction to the Petroleum Industry	3		
MET123	Material Science	2		
PET131	Corrosion Basics	3		
PET132	Petroleum Instrumentation	3		
PET141	Oil & Gas Lease Operation	3		
PET142	Artificial Lift	3		
	Total	**24**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM122	Interpersonal Communication	3		
ENV121	Regulations and Compliance	3		
	Total	**7**		
	TOTAL CREDIT HOURS	**31**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

PRODUCTION TECHNICIAN (One-Year Certificate)

Effective Summer 2014

Semester I		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MST221	Mechanical Drive Components	3	
ENV121	Regulations and Compliance	3	
PET101	Introduction to the Petroleum Industry	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
MET123	Material Science	2	
		16	
Semester II			
PET131	Corrosion Basics	3	
PET132	Petroleum Instrumentation	3	
PET141	Oil & Gas Lease Operation	3	
PET142	Artificial Lift	3	
COM122	Interpersonal Communication	3	
		15	
	TOTAL CREDITS	**31**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF SCIENCE

4205

PRE-ENGINEERING – CIVIL ENGINEERING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^	1	*Take first semester*	
WRITTEN & ORAL COMMUNICATION: ***3 credit hours required***				
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOCIAL & BEHAVIORAL SCIENCES: ***6 credit hours required***				
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity	3		
ARTS & HUMANITIES: ***6 credit hours required***				
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: 10 credit hours required (2 lab courses required)				
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
Mathematics: 13 credit hours required				
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** proficiency	
MTH223	Analytical Geometry and Calculus I^*	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytical Geometry and Calculus II	4	MTH223	
CONCENTRATION CORE: ***23 credits required***				
MTH225	Analytical Geometry and Calculus III	4	MTH224	
PHY221	General Physics I w/Calculus (lab)	5	MTH223 **and** MTH224	
MTH227	Ordinary Differential Equations	3	MTH224	
CST121	Modeling and Simulation	3	MTH221 **or** MTH223	
DET125	Basic AutoCAD	3		
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
	TOTAL CREDIT HOURS	**63**		

^ Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

++Minimum grade of "C" required.

*Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Bridge Courses that can be taken at SSC prior to attending UA that apply towards the UA BS Degree: COM121, ENG221, PHY222. If you plan on taking additional courses at SSC beyond this list, we recommend that you verify transferability with UA advisor prior to taking the course. Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer. SSC recommends contacting The University of Akron's Transfer Student Services Center during the first semester to discuss junior year SSC AS pre-engineering transition strategies to UA's Engineering B.S. programs (330) 972-7009.

PRE-ENGINEERING – CIVIL ENGINEERING

Effective Summer 2014

		Credit Hours	Prerequisite
First Semester			
SSC101	Student Success Seminar^^	1	*Take first semester*
CHM141	General Chemistry I (w/lab)⅄	5	HS CHM 2 **or** CHM101
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH135	Precalculus^	5	(MTH093 and MTH094)++
		14	**or** Proficiency
Second Semester			
PHL122	Ethics	3	
SOC225	Cultural Diversity	3	
CHM142	General Chemistry II (w/lab)	5	CHM141
MTH223	Analytical Geometry and Calculus 1^*	4	MTH135 **or** (MTH125 and
		15	MTH130) **or** Proficiency
Summer Semester			
MTH224	Analytical Geometry and Calculus II	**4**	MTH223
Third Semester			
PHY221	General Physics I w/Calculus (lab)	5	MTH223 **and** MTH224
MTH225	Analytical Geometry and Calculus III	4	MTH224
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
CST121	Modeling and Simulation	3	MTH221 **or** MTH223
		16	
Fourth Semester			
DET125	Basic AutoCAD	3	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
HIS122	US History II from 1877	3	
MET221	Advanced Strength of Materials	2	MET124
MTH227	Ordinary Differential Equations	3	MTH224
		14	
	TOTAL CREDITS	**63**	

^ Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

++Minimum grade of "C" required.

*Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF SCIENCE

4054

PRE-ENGINEERING – MECHANICAL ENGINEERING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^	1	*Take first semester*	
WRITTEN & ORAL COMMUNICATION: ***3 credit hours required***				
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOCIAL & BEHAVIORAL SCIENCES: ***6 credit hours required***				
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity	3		
ARTS & HUMANITIES: ***6 credit hours required***				
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: 10 credit hours required (2 lab courses required)				
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
Mathematics: 13 credit hours required				
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** proficiency	
MTH223	Analytical Geometry and Calculus I^*	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytical Geometry and Calculus II	4	MTH223	
CONCENTRATION CORE: ***23 credits required***				
MTH225	Analytical Geometry and Calculus III	4	MTH224	
PHY221	General Physics I with Calculus (lab)	5	MTH223 **and** MTH224	
CST121	Modeling and Simulation	3	MTH221 **or** MTH223	
DET125	Basic AutoCAD	3		
MET123	Material Science	2		
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
	TOTAL CREDIT HOURS	**62**		

^ Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

++Minimum grade of "C" required.

*Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Bridge Courses that can be taken at SSC prior to attending UA that apply towards the UA BS Degree: COM121, ENG221, PHY222. If you plan on taking additional courses at SSC beyond this list, we recommend that you verify transferability with UA advisor prior to taking the course. Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer. SSC recommends contacting The University of Akron's Transfer Student Services Center during the first semester to discuss junior year SSC AS pre-engineering transition strategies to UA's Engineering B.S. programs (330) 972-7009.

PRE-ENGINEERING – MECHANICAL ENGINEERING

Effective Summer 2014

		Credit Hours	Prerequisite
First Semester			
SSC101	Student Success Seminar^^	1	*Take first semester*
CHM141	General Chemistry I (w/lab)⅄	5	HS CHM 2 **or** CHM101
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH135	Precalculus^	5	(MTH093 and MTH094)++
		14	**or** Proficiency
Second Semester			
PHL122	Ethics	3	
SOC225	Cultural Diversity	3	
CHM142	General Chemistry II (w/lab)	5	CHM141
MTH223	Analytical Geometry and Calculus 1^*	4	MTH135 **or** (MTH125 and
		15	MTH130) **or** Proficiency
Summer Semester			
MTH224	Analytical Geometry and Calculus II	**4**	MTH223
Third Semester			
PHY221	General Physics I w/Calculus (lab)	5	MTH223 **and** MTH224
MTH225	Analytical Geometry and Calculus III	4	MTH224
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
		16	
Fourth Semester			
CST121	Modeling and Simulation	3	MTH221 **or** MTH223
MET221	Advanced Strength of Materials	2	MET124
MET123	Material Science	2	
HIS122	US History II from 1877	3	
DET125	Basic AutoCAD	3	
		13	
	TOTAL CREDITS	**62**	

^ Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

++Minimum grade of "C" required.

*Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF SCIENCE

4102

PRE-ENGINEERING – ELECTRICAL ENGINEERING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^	1	*Take first semester*	
WRITTEN & ORAL COMMUNICATION: ***3 credit hours required***				
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOCIAL & BEHAVIORAL SCIENCES: ***6 credit hours required***				
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity	3		
ARTS & HUMANITIES: ***6 credit hours required***				
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: 5 credit hours required (1 lab courses required)				
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
Mathematics: 16 credit hours required				
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytical Geometry and Calculus I^*	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytical Geometry and Calculus II	4	MTH223	
MTH227	Ordinary Differential Equations	3	MTH224	
CONCENTRATION CORE: ***27 credits required***				
MTH225	Analytical Geometry and Calculus III	4	MTH224	
PHY221	General Physics I with Calculus (lab)	5	MTH223 **and** MTH224	
EET120	DC Circuit Analysis	4	MTH125 or MTH135	
EET122	AC Circuit Analysis	4	EET120	
CSE122	Programming Logic and Problem Solving	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CST121	Modeling and Simulation	3	MTH221 **or** MTH223	
MET124	Statics and Strength of Materials	4	Co-PHY121 **or** Co-PHY221	
	TOTAL CREDIT HOURS	**64**		

^ Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

++Minimum grade of "C" required.

*Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Bridge Courses that can be taken at SSC prior to attending UA that apply towards the UA BS Degree: COM121, ENG221, PHY222, MTH227, CSE233. If you plan on taking additional courses at SSC beyond this list, we recommend that you verify transferability with UA advisor prior to taking the course. Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer. SSC recommends contacting The University of Akron's Transfer Student Services Center during the first semester to discuss junior year SSC AS pre-engineering transition strategies to UA's Engineering B.S. programs (330) 972-7009.

PRE-ENGINEERING – ELECTRICAL ENGINEERING

Effective Summer 2014

		Credit Hours	Prerequisite
First Semester			
SSC101	Student Success Seminar^^	1	*Take first semester*
CHM141	General Chemistry I (w/lab)⅄	5	HS CHM 2 **or** CHM101
ENG124	College Composition^	3	ENG011 **or** Proficiency
EET120	DC Circuit Analysis	4	MTH135 MTH125
MTH135	Precalculus^	5	(MTH093 and MTH094)++
		18	**or** Proficiency
Second Semester			
PHL122	Ethics	3	
SOC225	Cultural Diversity	3	
EET122	AC Circuit Analysis	4	EET120
MTH223	Analytical Geometry and Calculus 1^*	4	MTH135 **or** (MTH125 and
		14	MTH130) **or** Proficiency
Summer Semester			
MTH224	Analytical Geometry and Calculus II	**4**	MTH223
Third Semester			
PHY221	General Physics I w/Calculus (lab)	5	MTH223 **and** MTH224
MTH225	Analytical Geometry and Calculus III	4	MTH224
MET124	Statics & Strength of Materials	4	Co-PHY121 **or** Co-PHY221
		13	
Fourth Semester			
MTH227	Ordinary Differential Equations	3	MTH224
BUS221	Microeconomics^	3	IDS102 or Proficiency
CST121	Modeling and Simulation	3	MTH221 or MTH223
HIS122	US History II from 1877	3	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and**
		15	(ITD100 or Proficiency)
	TOTAL CREDITS	**64**	

^ Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

++Minimum grade of "C" required.

*Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2258

ASE TEST PREPARATION ELECTIVES

Effective Summer 2014

The Stark State College Automotive Service Excellence (ASE) test preparation elective courses are designed to prepare the student for the ASE certification and testing process. ASE is the nationally recognized industry standard for automotive technician certification.

In the ASE Test Preparation elective, students will access ASE practice tests, instructional videos, technical reference materials, and discussion forums via Stark State College's approved learning management system. Instructor-led discussions will cover ASE certification areas A-1 Engine Repair, A-4 Suspension and Steering, A-5 Brakes, A-6 Electrical/Electronic Systems, and A-7 Heating and Air Conditioning.

In the Applied Automotive Principles elective, students will develop greater confidence and better hands-on skills through an instructor-guided work experience in an automotive lab environment. By referencing service information and applying a strategy-based diagnostic approach, students will be able to reinforce their existing technical skills and develop new service techniques that will help them to be better prepared for ASE certification and to enter the workplace as an automotive technician. Hands-on labs will directly relate to ASE certification areas A-1 Engine Repair, A-4 Suspension and Steering, A-5 Brakes, A-6 Electrical/Electronic Systems, and A-7 Heating and Air Conditioning.

The courses listed below are electives to the Automotive Technology Associate Degree program (2250).

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT 137	ASE Test Preparation	2		
AUT 138	Applied Automotive Principles	4		
	TOTAL CREDIT HOURS	**6**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2259

AUTOMOTIVE AFTERMARKET VEHICLE MODIFICATIONS

Effective Summer 2014

The Stark State College Automotive Aftermarket Vehicle Modifications Career Enhancement Certificate courses are designed to prepare the student for the fast-growing area of vehicle modifications using aftermarket components and procedures. Students will practice new technical skills while being introduced to the business side of the aftermarket industry. Upon completion of the classes listed below, students will be prepared to work at a new or used car dealership's accessories department, work at an independent or franchised aftermarket shop, or possibly start their own aftermarket vehicle modifications business.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT 121	Automotive Technical Skills	2		
AUT 123	Engine Diagnosis and Major Service	4	AUT 121	
AUT 124	Vehicle Chassis Systems	4	AUT 121	
AUT 125	Automotive Electrical and Accessory Circuits	4	AUT 121	
AUT 254	Automotive Aftermarket Vehicle Interior Modifications	3	AUT 125	
AUT 255	Automotive Aftermarket Vehicle Exterior Modifications	3	AUT 125	
AUT 256	Automotive Aftermarket Vehicle Powertrain Modifications	3	AUT 123	
AUT 257	Automotive Aftermarket Vehicle Chassis Modifications	3	AUT 124	
	TOTAL CREDIT HOURS	**26**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
AUT 121	Automotive Technical Skills	2	
AUT 123	Engine Diagnosis and Major Service	4	AUT 121
		6	
Second Semester			
AUT 124	Vehicle Chassis Systems	4	AUT 121
AUT 125	Automotive Electrical and Accessory Circuits	4	AUT 121
		8	
Third Semester			
AUT 254	Automotive Aftermarket Vehicle Interior Modifications	3	AUT 125
AUT 255	Automotive Aftermarket Vehicle Exterior Modifications	3	AUT 125
AUT 256	Automotive Aftermarket Vehicle Powertrain Modifications	3	AUT 123
AUT 257	Automotive Aftermarket Vehicle Chassis Modifications	3	AUT 124
		12	
	TOTAL CREDITS	**26**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2260

AUTOMOTIVE DETAILING

Effective Summer 2014

The Stark State College Automotive Detailing Career Enhancement Certificate courses are designed to prepare the student to become a professional automotive detail technician. These courses can be selected as electives to the automotive technology associate degree program (2250) or as a stand-alone Career Enhancement Certificate.

The curriculum is a blend of classroom theory and extensive hands-on lab assignments that follow the International Detailing Association (IDA) guidelines. Successful completion of these courses will prepare the student to be an industry certificated (IDA) automotive detailing technician. Successful completion can also lead to employment opportunities in automotive dealership detailing departments, independent detailing companies, or franchised detailing companies. Students should be able to even start their own detailing business.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT 130	Automotive Safety and Shop Standards	2		
AUT 131	Automotive Detailing Business Practices	2		
AUT 132	Automotive Exterior Detailing	3		
AUT 133	Automotive Interior Detailing	2	AUT 132	
AUT 134	Automotive Under-Hood and Under-Car Detailing	2	AUT 132	
AUT 135	Advanced Automotive Detailing Techniques	3	AUT 132	
AUT 136	Practical Automotive Detailing Applications	2	AUT 132	
	TOTAL CREDIT HOURS	**16**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
AUT 130	Automotive Safety and Shop Standards	2	
AUT 131	Automotive Detailing Business Practices	2	
AUT 132	Automotive Exterior Detailing	3	
		7	
Second Semester			
AUT 133	Automotive Interior Detailing	2	AUT 132
AUT 134	Automotive Under-Hood and Under-Car Detailing	2	AUT 132
		4	
Third Semester			
AUT 135	Advanced Automotive Detailing Techniques	3	AUT 132
AUT 136	Practical Automotive Detailing Applications	2	AUT 132
		5	
	TOTAL CREDITS	**16**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2261

AUTOMOTIVE MAINTENANCE AND LIGHT REPAIR

Effective Summer 2014

The Stark State College Automotive Maintenance and Light Repair Career Enhancement Certificate quickly prepares the student to enter the job market at an automotive service facility. In our state-of-the-art automotive facility, students will use the latest tools and equipment to apply practical service techniques to our fleet of late-model vehicles. This builds hands-on skills that can be applied immediately upon completion.

The curriculum is accredited by the National Automotive Technicians Education Foundation (NATEF) preparing students to pursue Automotive Service Excellence (ASE) certification.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT 121	Automotive Technical Skills	2		
AUT 122	Automotive Systems and Engine Technology	4	AUT 121	
AUT 123	Engine Diagnosis and Major Service	4	AUT 121	
AUT 124	Vehicle Chassis Systems	4	AUT 121	
AUT 125	Automotive Electrical and Accessory Systems	4	AUT 121	
AUT 126	Automotive HVAC Systems	2	AUT 121	
	TOTAL CREDIT HOURS	**20**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
AUT 121	Automotive Technical Skills	2	
AUT 122	Automotive Systems and Engine Technology	4	AUT 121
AUT 123	Engine Diagnosis and Major Service	4	AUT 121
		10	
Second Semester			
AUT 124	Vehicle Chassis Systems	4	AUT 121
AUT 125	Automotive Electrical and Accessory Systems	4	AUT 121
AUT 126	Automotive HVAC Systems	2	AUT 121
		10	
	TOTAL CREDITS	**20**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2262

AUTOMOTIVE TRANSMISSION AND DRIVELINE

Effective Summer 2014

The Stark State College Automotive Transmission and Driveline Career Enhancement Certificate prepares the student for a productive career as an automotive transmission and driveline specialist. In our two state-of-the-art automotive facilities, students use the latest tools and diagnostic equipment to apply practical service techniques to our fleet of late-model vehicles. This builds hands-on skills that can be applied immediately upon graduation.

The curriculum is accredited by the National Automotive Technicians Education Foundation (NATEF) preparing students to pursue Automotive Service Excellence (ASE) certification.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT 121	Automotive Technical Skills	2		
AUT 122	Automotive Systems and Engine Technology	4	AUT 121	
AUT 124	Vehicle Chassis Systems	4	AUT 121	
AUT 125	Automotive Electrical and Accessory Systems	4	AUT 121	
AUT 223	Advanced Automotive Electronics	3	AUT 125	
AUT 225	Automotive Drivetrain I	3	AUT 121	
AUT 226	Automotive Drivetrain II	3	AUT 121	
AUT 227	Computerized Vehicle Control	3	AUT 125	
	TOTAL CREDIT HOURS	**26**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
AUT 121	Automotive Technical Skills	2	
AUT 122	Automotive Systems and Engine Technology	4	AUT 121
		6	
Second Semester			
AUT 124	Vehicle Chassis Systems	4	AUT 121
AUT 125	Automotive Electrical and Accessory Systems	4	AUT 121
		8	
Third Semester			
AUT 223	Advanced Automotive Electronics	3	AUT 125
AUT 225	Automotive Drivetrain I	3	AUT 121
AUT 226	Automotive Drivetrain II	3	AUT 121
AUT 227	Computerized Vehicle Control	3	AUT 125
		12	
	TOTAL CREDITS	**26**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2263

CAT LIFT TRUCK

Effective Summer 2014

The CAT Lift Truck (CLT) Career Enhancement Certification is designed exclusively for the student who is seeking a career as a service technician at a Caterpillar Lift Truck dealership. The Caterpillar-specific curriculum is produced by MCFA. It prepares the student for a career as a Caterpillar Lift Truck Technician by providing Caterpillar Lift Truck's core certification courses that are needed for advancement at a CAT Lift Truck dealership.

The CLT curriculum is a blend of classroom theory and hands-on lab assignments. The curriculum follows OSHA and Industrial Truck Association (ITA) guidelines. CLT-specific classes are scheduled to run on selected Fridays throughout each semester, including the summer, and are a full day in length.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT 121	Automotive Technical Skills	2		
AUT 123	Engine Diagnosis and Major Service	4	AUT 121	
AUT 125	Automotive Electrical and Accessory Circuits	4	AUT 121	
AUT 181	Intro To CAT Lift Trucks	1	AUT 121	
AUT 182	CAT Operator Safety Training	1	AUT 181	
AUT 183	CAT Service Information System	1	AUT 181	
AUT 184	CAT Hydraulic Systems	1	AUT 121	
AUT 185	CAT Internal Combustion Engine	2	AUT 123	
AUT 186	CAT Masts and Lift Mechanisms	1	AUT 121	
AUT 187	CAT Electrical Systems	3	AUT 125	
AUT 188	CAT Steering Systems	1	AUT 121	
AUT 189	CAT Braking Systems	1	AUT 121	
AUT 281	CAT Differentials and Front Axles	1	AUT 121	
AUT 282	CAT Transmissions	2	AUT 121	
AUT 283	CAT Fuel Systems (LP, Gasoline)	2	AUT 123	
	TOTAL CREDIT HOURS	**27**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

CAT LIFT TRUCK

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
AUT 121	Automotive Technical Skills	2	
AUT 123	Engine Diagnosis and Major Service	4	AUT 121
AUT 125	Automotive Electrical and Accessory Circuits	4	AUT 121
		10	
Second Semester			
AUT 181	Intro To CAT Lift Trucks	1	AUT 121
AUT 182	CAT Operator Safety Training	1	AUT 181
AUT 183	CAT Service Information System	1	AUT 181
AUT 184	CAT Hydraulic Systems	1	AUT 121
AUT 185	CAT Internal Combustion Engine	2	AUT 123
		6	
Third Semester			
AUT 186	CAT Masts and Lift Mechanisms	1	AUT 121
AUT 187	CAT Electrical Systems	3	AUT 125
AUT 188	CAT Steering Systems	1	AUT 121
AUT 189	CAT Braking Systems	1	AUT 121
		6	
Fourth Semester			
AUT 281	CAT Differentials and Front Axles	1	AUT 121
AUT 282	CAT Transmissions	2	AUT 121
AUT 283	CAT Fuel Systems (LP, Gasoline)	2	AUT 123
		5	
	TOTAL CREDITS	**27**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

2264

CAREER ENHANCEMENT CERTIFICATE

HONDA PACT

Effective Summer 2014

The Honda PACT Career Enhancement Certificate is designed exclusively for the student who is seeking a career as a service technician at a Honda/Acura dealership. The Honda PACT curriculum combines Stark State College NATEF-accredited automotive classes and Honda-specific curriculum that is produced by American Honda Motor Company, Inc. The Honda-specific classes provide Honda's core certification modules that are needed for advancement at a Honda/Acura dealership.

The Honda PACT classes are a blend of classroom theory and hands-on lab assignments. The Honda PACT classes are scheduled to run on selected Fridays throughout the semester, including the summer, and are a full day in length.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT 121	Automotive Technical Skills	2		
AUT 124	Vehicle Chassis Systems	4	AUT 121	
AUT 125	Automotive Electrical and Accessory Circuits	4	AUT 121	
AUT 221	Fuel and Emissions Management Systems	3	AUT 125	
AUT 222	Engine System Performance Diagnosis	3	AUT 125	
AUT 171	Introduction To Honda PACT	1	AUT 121	
AUT 172	Honda Engine Mechanical	2	AUT 121	
AUT 173	Honda Steering and Suspension	1	AUT 124	
AUT 174	Honda Braking Systems	1	AUT 124	
AUT 175	Honda Electrical Systems	2	AUT 125	
AUT 176	Honda HVAC Systems	1	AUT 125	
AUT 277	Honda Computerized Engine	2	AUT 222	
AUT 271	Honda Fuel and Emission System	1	AUT 221	
AUT 275	Honda Manual Transmissions	1	AUT 121	
AUT 276	Honda Automatic Transmissions	1	AUT 121	
	TOTAL CREDIT HOURS	**29**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

HONDA PACT

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
AUT 121	Automotive Technical Skills	2	
AUT 124	Vehicle Chassis Systems	4	AUT 121
AUT 125	Automotive Circuits and Accessory Circuits	4	AUT 121
AUT 171	Introduction to Honda PACT	1	AUT 121
AUT 172	Honda Engine Mechanical	2	AUT 121
		13	
Second Semester			
AUT 221	Fuel and Emission Management Systems	3	AUT 125
AUT 222	Engine System Performance Diagnosis	3	AUT 125
AUT 173	Honda Steering and Suspension	1	AUT 124
AUT 174	Honda Braking Systems	1	AUT 124
AUT 175	Honda Electrical Systems	2	AUT 125
AUT 176	Honda HVAC Systems	1	AUT 125
		11	
Third Semester			
AUT 277	Honda Computerized Engine	2	AUT 222
AUT 271	Honda Fuel and Emission System	1	AUT 221
AUT 275	Honda Manual Transmissions	1	AUT 121
AUT 276	Honda Automatic Transmissions	1	AUT 121
		5	
	TOTAL CREDITS	**29**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2265

TOYOTA T-TEN

Effective Summer 2014

The T-TEN Career Enhancement Certificate is designed exclusively for the student who is seeking a career as a service technician at a Toyota/Lexus dealership. The T-TEN curriculum combines Stark State College NATEF-accredited automotive classes and Toyota-specific curriculum that is produced by the University of Toyota. The Toyota-specific classes provide Toyota's core certification modules that are needed for advancement at a Toyota/Lexus dealership.

The T-TEN curriculum is a blend of classroom theory and hands-on lab assignments. The curriculum follows both the ASE and NATEF guidelines. This allows the student to pursue ASE certification.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AUT 121	Automotive Technical Skills	2		
AUT 124	Vehicle Chassis Systems	4	AUT 121	
AUT 125	Automotive Electrical and Accessory Circuits	4	AUT 121	
AUT 126	Automotive HVAC Systems	2	AUT 121	
AUT 221	Fuel and Emissions Management Systems	3	AUT 125	
AUT 222	Engine System performance Diagnosis	3	AUT 125	
AUT 141	Vehicle Chassis Systems	2	AUT 124	
AUT 142	Auto Electrical Systems Toyota	2	AUT 125	
AUT 143	Auto HVAC Systems Toyota 750	1	AUT 126	
AUT 251	Automotive Drivetrain I	1	AUT 121	
AUT 252	Automotive Drivetrain II	1	AUT 121	
AUT 253	Computerized Vehicle Controls	2	AUT 222	
	TOTAL CREDIT HOURS	**27**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

TOYOTA T-TEN

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
AUT 121	Automotive Technical Skills	2	
AUT 124	Vehicle Chassis Systems	4	AUT 121
AUT 125	Automotive Electrical and Accessory Circuits	4	AUT 121
		10	
Second Semester			
AUT 126	Automotive HVAC Systems	2	AUT 121
AUT 142	Auto Electrical Systems (Toyota)	2	AUT 125
AUT 221	Fuel and Emissions Management Systems	3	AUT 125
AUT 222	Engine Systems Performance Diagnosis	3	AUT 125
		10	
Third Semester			
AUT 141	Vehicle Chassis Systems (Toyota)	2	AUT 124
AUT 143	Auto HVAC Systems (Toyota)	1	AUT 126
AUT 251	Automotive Drivetrain I (Toyota)	1	AUT 121
AUT 252	Automotive Drivetrain II (Toyota)	1	AUT 121
AUT 253	Computerized Vehicle Controls (Toyota)	2	AUT 222
		7	
	TOTAL CREDITS	**27**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2266

TOYOTA T-TEN REGIONAL PROGRAM

ELECTRICAL, MANUAL TRANSMISSIONS, AND HVAC

Effective Summer 2014

The Toyota T-TEN Regional program is designed to prepare students to become technicians at Toyota and Lexus dealerships. Certified Toyota T-TEN instructors will provide students with access to Toyota vehicle technology through curriculum designed by the University of Toyota and accredited by the National Automotive Technicians Educational Foundation (NATEF). Students successfully completing the Toyota T-TEN Regional Program Electrical, Manual Transmission, and HVAC Career Enhancement Certificate from Stark State College will be prepared to take three ASE (Automotive Service Excellence) Certification Tests (A-3, A-6, and A-7). The program structure also allows ample time for students to attend classes at Stark State College while working at an approved Toyota or Lexus dealership.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
TOY 101	Introduction to Toyota T-TEN	3		
TOY 102	Toyota Electrical Systems I	5	TOY 101	
TOY 201	Toyota Electrical Systems II	5	TOY 102	
TOY 106	Toyota Manual Transmissions and Drivetrains	5	TOY 102	
TOY 203	Toyota HVAC Systems	5	TOY 201	
AUT 193	Automotive CO-OP 3	2		
AUT 194	Automotive CO-OP 4	2		
	TOTAL CREDIT HOURS	**27**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

		Credit Hours	Pre- and Co-requisites
First Semester - FALL			
TOY 101	Introduction to Toyota T-TEN	3	
TOY 102	Toyota Electrical Systems I	5	TOY 101
		8	
Second Semester - SPRING			
TOY 201	Toyota Electrical Systems II	5	TOY 102
		5	
Third Semester - SUMMER			
TOY 106	Toyota Manual Transmissions and Drivetrains	5	TOY 102
		5	
Fourth Semester - FALL			
TOY 203	Toyota HVAC Systems	5	TOY 201
AUT 193	Automotive CO-OP 3	2	
		7	
Fifth Semester - SPRING			
AUT 194	Automotive CO-OP 4	2	
		2	
	TOTAL CREDITS	**27**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2267

TOYOTA T-TEN REGIONAL PROGRAM

ENGINE REPAIR, ENGINE CONTROL, AND AUTOMATIC TRANSMISSION

Effective Summer 2014

The Toyota T-TEN Regional program is designed to prepare students to become technicians at Toyota and Lexus dealerships. Certified Toyota T-TEN instructors will provide students with access to Toyota vehicle technology through curriculum designed by the University of Toyota and accredited by the National Automotive Technicians Educational Foundation (NATEF). Students successfully completing the Toyota T-TEN Regional Program Engine Repair, Engine Control, and Automatic Transmission Career Enhancement Certificate from Stark State College will be prepared to take three ASE (Automotive Service Excellence) Certification Tests (A-1, A-2, and A-8). The program structure also allows ample time for students to attend classes at Stark State College while working at an approved Toyota or Lexus dealership.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
TOY 101	Introduction to Toyota T-TEN	3		
TOY 102	Toyota Electrical Systems I	5	TOY 101	
TOY 104	Toyota Engine Diagnosis and Repair	5	TOY 101	
TOY 105	Toyota Engine Controls I	5	TOY 104	
TOY 204	Toyota Engine Controls II	5	TOY 105	
TOY 205	Toyota Automatic Transmissions	5	TOY 204	
	TOTAL CREDIT HOURS	**28**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester – FALL		Credit Hours	Pre- and Co-requisites
TOY 101	Introduction to Toyota T-TEN	3	
TOY 102	Toyota Electrical Systems I	5	TOY 101
		8	
Second Semester – SUMMER			
TOY 104	Toyota Engine Diagnosis and Repair	5	TOY 101
		5	
Third Semester – FALL			
TOY 105	Toyota Engine Controls I	5	TOY 104
		5	
Fourth Semester – SPRING			
TOY 204	Toyota Engine Controls II	5	TOY 105
TOY 205	Toyota Automatic Transmissions	5	TOY 204
		10	
	TOTAL CREDITS	**28**	

Revised 9/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2268

TOYOTA T-TEN REGIONAL PROGRAM

ELECTRICAL, BRAKES, STEERING, AND SUSPENSION

Effective Summer 2014

The Toyota T-TEN Regional program is designed to prepare students to become technicians at Toyota and Lexus dealerships. Certified Toyota T-TEN instructors will provide students with access to Toyota vehicle technology through curriculum designed by the University of Toyota and accredited by the National Automotive Technicians Educational Foundation (NATEF). Students successfully completing the Toyota T-TEN Regional Program Electrical, Brakes, Steering and Suspension Career Enhancement Certificate will be prepared to take three ASE (Automotive Service Excellence) Certification Tests (A-4, A-5, and A-6). The program structure also allows ample time for students to attend classes at Stark State College while working at an approved Toyota or Lexus dealership.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
TOY 101	Introduction to Toyota T-TEN	3		
TOY 102	Toyota Electrical Systems I	5	TOY 101	
TOY 103	Toyota Steering, Suspension, and Handling	5	TOY 102	
TOY 201	Toyota Electrical Systems II	5	TOY 102	
TOY 202	Toyota Automotive Braking Systems	5	TOY 201	
AUT 191	Automotive CO-OP 1	2		
AUT 192	Automotive CO-OP 2	2		
	TOTAL CREDIT HOURS	**27**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester - FALL		Credit Hours	Pre- and Co-requisites
Toy 101	Introduction to Toyota T-TEN	3	
TOY 102	Toyota Electrical Systems I	5	TOY 101
TOY 103	Toyota Steering, Suspension, and Handling	5	TOY 102
AUT 191	Automotive CO-OP 1	2	
		15	
Second Semester - SPRING			
TOY 201	Toyota Electrical Systems II	5	TOY 102
TOY 202	Toyota Automotive Braking Systems	5	TOY 201
AUT 192	Automotive CO-OP 2	2	
		12	
	TOTAL CREDITS	**27**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4002

APPLIED INDUSTRIAL TECHNOLOGY – QUALITY ASSURANCE SPECIALIST

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST131	Statistical Process Control Charts^	2	(MTH093 and MTH094)++ **or** Proficiency	
IET270	Dimensional Metrology and Inspection I^	3	(MTH093 and MTH094)++ **or** Proficiency	
	TOTAL CREDIT HOURS	**5**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MST131	Statistical Process Control Charts^	2	(MTH093 and MTH094)++ **or** Proficiency
IET270	Dimensional Metrology and Inspection I^	3	(MTH093 and MTH094)++ **or** Proficiency
	TOTAL CREDITS	**5**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4003

DESIGN ENGINEERING TECHNOLOGY – ADVANCED CAD

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET121	Engineering Drawing	3		
DET125	Basic AutoCAD	3		
DET126	Customizing AutoCAD	3	DET125	
DET131	Pro Engineer	3	DET121	
DET230	Advanced AutoCAD (Inventor)	3	DET125	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
DET121	Engineering Drawing	3	
DET125	Basic AutoCAD	3	
		6	
Second Semester			
DET126	Customizing AutoCAD	3	DET125
DET131	Pro Engineer	3	DET121
DET230	Advanced AutoCAD (Inventor)	3	DET125
		9	
	TOTAL CREDITS	**15**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4004

DESIGN ENGINEERING TECHNOLOGY – AUTOCAD

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET125	Basic AutoCAD	3		
DET126	Customizing AutoCAD	3	DET125	
DET230	Advanced AutoCAD (Inventor)	3	DET125	
	TOTAL CREDIT HOURS	**9**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
DET125	Basic AutoCAD	**3**	
Second Semester			
DET126	Customizing AutoCAD	3	DET125
DET230	Advanced AutoCAD (Inventor)	3	DET125
		6	
	TOTAL CREDITS	**9**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4005

DESIGN ENGINEERING TECHNOLOGY – PRECISION GAUGING AND INSPECTION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET121	Engineering Drawing	3		
DET124	Working Drawings	3	DET121 **and** Co-DET125	
DET125	Basic AutoCAD	3		
DET226	Geometric Dimensioning and Tolerancing	2	DET124	
IET270	Dimensional Metrology and Inspection I^	3	(MTH093 and MTH094)++ **or** Proficiency	
	TOTAL CREDIT HOURS	**14**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
DET121	Engineering Drawing	3	
IET270	Dimensional Metrology and Inspection I^	3	(MTH093 and MTH094)++ **or** Proficiency
		6	
Second Semester			
DET124	Working Drawings	3	DET121 **and** Co-DET125
DET125	Basic AutoCAD	3	
		6	
Third Semester			
DET226	Geometric Dimensioning and Tolerancing	**2**	DET124
	TOTAL CREDITS	**14**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

Revised 2/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4055

MECHANICAL ENGINEERING TECHNOLOGY – FUEL CELL

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MET229	Introduction to Alternative Energy and Fuel Cells	3		
MET230	Analysis and Applications of Types of Fuel Cells	3	MET229	
MET231	Fuel Cell Systems	3	MET230	
MET232	Fuel Cell Project	3	MET231	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

		Credit Hours	Pre- and Co-requisites
First Semester			
MET229	Introduction to Alternative Energy and Fuel Cells	**3**	
Second Semester			
MET230	Analysis and Applications of Types of Fuel Cells	**3**	MET229
Third Semester			
MET231	Fuel Cell Systems	**3**	MET230
Fourth Semester			
MET232	Fuel Cell Project	**3**	MET231
	TOTAL CREDITS	**12**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4056

MECHANICAL ENGINEERING TECHNOLOGY – MACHINE DESIGN

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MET221	Advanced Strength of Materials	2	MET124	
MET226	Technical Project – Mechanical and Design	2	SSC101 **and** (DET125 or DET131	
MET228	Machine Design	4	MET124	
	TOTAL CREDIT HOURS	**8**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MET221	Advanced Strength of Materials	2	MET124
MET226	Technical Project – Mechanical and Design	2	SSC101 **and** (DET125 or DET131)
MET228	Machine Design	4	MET124
	TOTAL CREDITS	**8**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4057

MECHANICAL ENGINEERING TECHNOLOGY – MECHANICAL POWER

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
MET222	Fluid Power	4	MET124	
MET228	Machine Design	4	MET124	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
MET222	Fluid Power	4	MET124
MET228	Machine Design	4	MET124
	TOTAL CREDITS	**12**	

^Based upon SSC placement score.

++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4206

CIVIL ENGINEERING TECHNOLOGY – ARCHITECTURAL DRAFTING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials and Construction Methods	3		
CET122	Architectural Drafting I	3		
CET123	Architectural Drafting II	3	Co-CET121 **and** CET122	
CET234	A/E CAD	2	CET121 **and** CET122 **and** DET125	
DET125	Basic AutoCAD	3		
	TOTAL CREDIT HOURS	**14**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CET122	Architectural Drafting I	3	
DET125	Basic AutoCAD	3	
		6	
Second Semester			
CET121	Building Materials and Construction Methods	3	
CET123	Architectural Drafting II	3	Co-CET121 and CET122
		6	
Third Semester			
CET234	A/E CAD	**2**	CET121 **and** CET122 **and** DET125
	TOTAL CREDITS	**14**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4207

CIVIL ENGINEERING TECHNOLOGY – CIVIL / SURVEYING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET227	Surveying I	3	Co-MTH135	
CET228	Surveying II	3	CET227	
CET236	Global Positioning System	3	CET227	
	TOTAL CREDIT HOURS	**9**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CET227	Surveying I	**3**	Co-MTH135
Second Semester			
CET228	Surveying II	3	CET227
CET236	Global Positioning System	3	CET227
		6	
	TOTAL CREDITS	**9**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4208

CIVIL ENGINEERING TECHNOLOGY – CIVIL/SURVEYING DRAFTING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials and Construction Methods	3		
CET237	Interpreting Construction Documents	2		
DET125	Basic AutoCAD	3		
	TOTAL CREDIT HOURS	**8**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CET121	Building Materials and Construction Methods	3	
CET237	Interpreting Construction Documents	2	
DET125	Basic AutoCAD	3	
	TOTAL CREDITS	**8**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4209

CIVIL ENGINEERING TECHNOLOGY – CONSTRUCTION MATERIALS INSPECTION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials and Construction Methods	3		
CET125	Soil Mechanics	3	MTH135 **and** Co-MET124	
CET222	Concrete and Asphalt Testing	3	CET121 **and** MTH135	
	TOTAL CREDIT HOURS	**9**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CET121	Building Materials and Construction Methods	**3**	
Second Semester			
CET125	Soil Mechanics	3	MTH135 **and** Co-MET124
CET222	Concrete and Asphalt Testing	3	CET121 **and** MTH135
		6	
	TOTAL CREDITS	**9**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4210

CIVIL ENGINEERING TECHNOLOGY – CONSTRUCTION TECHNICIAN

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials and Construction Methods	3		
CET235	Construction Management, Job Cost and Safety	3	CET121 **and** ITD122	
CET237	Interpreting Construction Documents	2		
DET125	Basic AutoCAD	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
	TOTAL CREDIT HOURS	**14**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CET121	Building Materials and Construction Methods	3	
CET237	Interpreting Construction Documents	2	
DET125	Basic AutoCAD	3	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
		11	
Second Semester			
CET235	Construction Management, Job Cost and Safety	**3**	CET121 and ITD122
	TOTAL CREDITS	**14**	

^Based upon SSC placement score.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4316

APPLIED INDUSTRIAL TECHNOLOGY – CAD/CAM SPECIALIST

(COMPUTER-AIDED DRAFTING / COMPUTER-AIDED MACHINING)

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT122	Machine Tools	3		
IET223	Computer Numerical Control	4		
AIT137	CAD/CAM	4	AIT 122 **and** IET 223	
AIT225	Advanced CAD/CAM	4	AIT 137	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
AIT122	Machine Tools	3	
IET223	Computer Numerical Control	4	
		7	
Second Semester			
AIT137	CAD/CAM	**4**	AIT122 **and** IET223
Third Semester			
AIT225	Advanced CAD/CAM	**4**	AIT137
	TOTAL CREDITS	**15**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4317

APPLIED INDUSTRIAL TECHNOLOGY – INDUSTRIAL HYDRAULICS AND PNEUMATICS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST125	Basic Pumps	3		
MST126	Pipefitting Principles and Applications	4		
MST135	Plumbing and Pipe Code Principles	3		
MST134	Hydraulic and Pneumatic Systems	6		
	TOTAL CREDIT HOURS	**16**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MST125	Basic Pumps	3	
MST134	Hydraulic and Pneumatic Systems	6	
		9	
Second Semester			
MST126	Pipefitting Principles and Applications	4	
MST135	Plumbing and Pipe Code Principles	3	
		7	
	TOTAL CREDITS	**16**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4318

APPLIED INDUSTRIAL TECHNOLOGY – MECHANICAL DRIVE SYSTEMS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST121	Blueprint Reading	2		
MST221	Mechanical Drive Components	3		
MST125	Basic Pumps	3		
MST134	Hydraulic and Pneumatic Systems	6		
	TOTAL CREDIT HOURS	**14**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MST121	Blueprint Reading	2	
MST125	Basic Pumps	3	
MST134	Hydraulic and Pneumatic Systems	6	
MST221	Mechanical Drive Components	3	
	TOTAL CREDITS	**14**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4319

APPLIED INDUSTRIAL TECHNOLOGY – PRECISION MACHINING AND CNC PROGRAMMING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT122	Machine Tools	3		
AIT123	Advanced Machine Tools	4	AIT122	
IET223	Computer Numerical Control	4		
	TOTAL CREDIT HOURS	**11**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
AIT122	Machine Tools	3	
IET223	Computer Numerical Control	4	
		7	
Second Semester			
AIT123	Advanced Machine Tools	**4**	AIT122
	TOTAL CREDITS	**11**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4320

APPLIED INDUSTRIAL TECHNOLOGY – WELDING TECHNOLOGY AWS* CERTIFICATION EXAM PREPARATION

GENERAL MIG, TIG, ALUMINUM, AND OXYFUEL WELDING

(GENERAL AWS D1.1 EXAM PREP)

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST127	Principles of Welding♦	3	Co-MST128	
MST128	Welding Lab♦	3	Co-MST127	
	TOTAL CREDIT HOURS	**6**		

*AWS stands for *American Welding Society*.

♦AWS testing available at applicable course completion.

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4321

APPLIED INDUSTRIAL TECHNOLOGY – 3G WELDING CERTIFICATION EXAM PREPARATION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST127	Principles of Welding	3	Co-MST128	
MST128	Welding Lab	3	Co-MST127	
MST136	3G Welding Certification Exam Preparatory#♦	2	MST127 **and** MST128	
	TOTAL CREDIT HOURS	**8**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MST127	Principles of Welding	3	Co-MST128
MST128	Welding Lab	3	Co-MST127
		6	
Second Semester			
MST136	3G Welding Certification Exam Preparatory#♦	**2**	MST127 **and** MST128
	TOTAL CREDITS	**8**	

#Prerequisite of satisfactory welding required prior to course enrollment.

♦AWS testing available at applicable course completion.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4322

APPLIED INDUSTRIAL TECHNOLOGY – 6G WELDING CERTIFICATION EXAM PREPARATION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST127	Principles of Welding	3	Co-MST128	
MST128	Welding Lab	3	Co-MST127	
MST137	6G Welding Certification Exam Preparatory#♦	5	MST127 **and** MST128	
	TOTAL CREDIT HOURS	**11**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MST127	Principles of Welding	3	Co-MST128
MST128	Welding Lab	3	Co-MST127
		6	
Second Semester			
MST137	6G Welding Certification Exam Preparatory#♦	**5**	MST127 **and** MST128
	TOTAL CREDITS	**11**	

#Prerequisite of satisfactory welding required prior to course enrollment.

♦AWS testing available at applicable course completion.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4324

APPLIED INDUSTRIAL TECHNOLOGY – TITANIUM / STAINLESS STEEL WELDING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST138	Preparatory Gas Tungsten Arc Welding – Titanium / Stainless Steel #	5	MST127 **and** MST128	
MST139	Gas Tungsten Arc Welding-Titanium / Stainless Steel ♦	3	MST138	
	TOTAL CREDIT HOURS	**8**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MST138	Preparatory Gas Tungsten Arc Welding – Titanium / Stainless Steel #	**5**	MST127 **and** MST128
Second Semester			
MST139	Gas Tungsten Arc Welding-Titanium / Stainless Steel ♦	**3**	MST138
	TOTAL CREDITS	**8**	

#Prerequisite of satisfactory welding required prior to course enrollment.

♦AWS testing available at applicable course completion.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4327

OIL AND GAS TECHNOLOGY – NATURAL GAS AND OIL TECHNOLOGY SHALENET C1

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
COM122	Interpersonal Communication	3		
ENV121	Regulations and Compliance	3		
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
MST221	Mechanical Drive Components	3		
PET101	Introduction to the Petroleum Industry	3		
PET102	Introduction to Supervisory Control and Data Acquisition SCADA	2		
	TOTAL CREDIT HOURS	**18**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
COM122	Interpersonal Communication	3	
ENV121	Regulations and Compliance	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
MST221	Mechanical Drive Components	3	
PET101	Introduction to the Petroleum Industry	3	
PET102	Introduction to Supervisory Control and Data Acquisition SCADA	2	
	TOTAL CREDITS	**18**	

^Based upon SSC placement score.

++ Requires a "C" or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4328

OIL AND GAS TECHNOLOGY – PETROLEUM BASIC INDUSTRIAL MAINTENANCE CORE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT134	Predictive and Preventive Maintenance I	3	MST125 **and** MST221	
AIT222	Predictive and Preventive Maintenance II	3	AIT134	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
MST121	Blueprint Reading	2		
MST125	Basic Pumps	3		
MST134	Hydraulic and Pneumatic Systems	6		
MST221	Mechanical Drive Components	3		
	TOTAL CREDIT HOURS	**24**		

^Based upon SSC placement score.
++Minimum grace of "C" required.

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

OIL AND GAS TECHNOLOGY – PETROLEUM BASIC INDUSTRIAL MAINTENANCE CORE

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
MST125	Basic Pumps	3	
MST221	Mechanical Drive Components	3	
		10	
Second Semester			
AIT134	Predictive and Preventive Maintenance I	3	MST125 **and** MST221
MST121	Blueprint Reading	2	
MST134	Hydraulic and Pneumatic Systems	6	
		11	
Summer Semester			
AIT222	Predictive and Preventive Maintenance II	**3**	AIT134
	TOTAL CREDITS	**24**	

^Based upon SSC placement score.
++Minimum grace of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4329

OIL AND GAS TECHNOLOGY – PETROLEUM BASIC INDUSTRIAL PROCESS CONTROLS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
EET228	PLCs and Industrial Controls II	3	EET227	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
IET228	Introduction to Robotics	2		
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
IET228	Introduction to Robotics	2	
		9	
Second Semester			
EET228	PLCs and Industrial Controls II	3	EET227
	TOTAL CREDITS	**12**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4330

OIL AND GAS TECHNOLOGY – PETROLEUM BASIC INDUSTRIAL PROCESS OPERATION CORE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST121	Blueprint Reading	2		
MST134	Hydraulic and Pneumatic Systems	6		
MST221	Mechanical Drive Components	3		
	TOTAL CREDIT HOURS	**11**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MST121	Blueprint Reading	2	
MST134	Hydraulic and Pneumatic Systems	6	
MST221	Mechanical Drive Components	3	
	TOTAL CREDITS	**11**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4331

OIL AND GAS TECHNOLOGY – RIGGING

OIL AND GAS INDUSTRY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT124	Principles of Rigging	2		
ENV221	OSHA 40-Hour HAZWOPER	2		
MST121	Blueprint Reading	2		
	TOTAL CREDIT HOURS	**6**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
AIT124	Principles of Rigging	2	
ENV221	OSHA 40-Hour HAZWOPER	2	
MST121	Blueprint Reading	2	
	TOTAL CREDITS	**6**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4332

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – SAFETY – HEAVY INDUSTRY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENV121	Regulations and Compliance	3		
ENV123	OSHA 10-Hour General Industry Safety	1		
ENV124	Transportation Hazardous Materials Training	1		
ENV169	Radiation Safety	2		
ENV221	OSHA 40-Hour HAZWOPER	2		
ENV228	Health and Safety	3	ENV121	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ENV121	Regulations and Compliance	3	
ENV123	OSHA 10-Hour General Industry Safety	1	
ENV124	Transportation Hazardous Materials Training	1	
ENV169	Radiation Safety	2	
ENV221	OSHA 40-Hour HAZWOPER	2	
		9	
Second Semester			
ENV228	Health and Safety	**3**	ENV121
	TOTAL CREDITS	**12**	

Revised 2/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4333

OIL AND GAS TECHNOLOGY – WELDING TECHNOLOGY FOR GAS & OIL PRODUCTION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST121	Blueprint Reading	2		
MST126	Pipefitting Principles and Applications	4		
MST127	Principles of Welding	3	Co-MST128	
MST128	Welding Lab	3	Co-MST127	
MST136	3G Welding Certification Exam Preparatory #♦	2	MST127 **and** MST128	
MST137	6G Welding Certification Exam Preparatory #♦	5	MST127 **and** MST128	
	TOTAL CREDIT HOURS	**19**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MST121	Blueprint Reading	2	
MST126	Pipefitting Principles and Applications	4	
MST127	Principles of Welding	3	Co-MST128
MST128	Welding Lab	3	Co-MST127
		12	
Second Semester			
MST136	3G Welding Certification Exam Preparatory #♦	2	MST127 **and** MST128
MST137	6G Welding Certification Exam Preparatory #♦	5	MST127 **and** MST128
		7	
	TOTAL CREDITS	**19**	

#Prerequisite of satisfactory welding required prior to course enrollment.

♦AWS testing available at applicable course completion.

Revised 2/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4334

OIL AND GAS TECHNOLOGY – LEASE OPERATOR

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PET131	Corrosion Basics	3		
PET132	Petroleum Instrumentation	3		
PET141	Oil and Gas Lease Operation	3		
PET142	Artificial Lift	3		
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
PET131	Corrosion Basics	3	
PET132	Petroleum Instrumentation	3	
PET141	Oil and Gas Lease Operation	3	
PET142	Artificial Lift	3	
	TOTAL CREDITS	**12**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4407

APPLIED INDUSTRIAL TECHNOLOGY – BASIC INDUSTRIAL MAINTENANCE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
EST130	Electrical Circuits & Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
MST121	Blueprint Reading	2		
MST134	Hydraulic and Pneumatic Systems	6		
	TOTAL CREDIT HOURS	**16**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
EST130	Electrical Circuits & Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
MST121	Blueprint Reading	2	
MST134	Hydraulic and Pneumatic Systems	6	
	TOTAL CREDITS	**16**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4408

ELECTRICAL / ELECTRONIC ENGINEERING TECHNOLOGY – ELECTRICAL / ELECTRONIC TROUBLESHOOTING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices and Circuits	4	EET120 **or** EST130	
	TOTAL CREDIT HOURS	**17**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
EET120	DC Circuit Analysis	4	Co-MTH135
		9	
Second Semester			
EET122	AC Circuit Analysis	4	EET120
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
		8	
	TOTAL CREDITS	**17**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4409

ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – INDUSTRIAL CONTROLS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET126	Electrical Machines	4	Co-EET122	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130	
EET228	PLCs and Industrial Controls II	3	EET227	
	TOTAL CREDIT HOURS	**18**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
EET120	DC Circuit Analysis	**4**	Co-MTH135
Second Semester			
EET122	AC Circuit Analysis	4	EET120
EET126	Electrical Machines	4	Co-EET122
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST130
		11	
Third Semester			
EET228	PLCs and Industrial Controls II	**3**	EET227
	TOTAL CREDITS	**18**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4410

ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – INDUSTRIAL ELECTRICITY AND ELECTRONICS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
EET120	DC Circuit Analysis	4	Co-MTH135	
EET122	AC Circuit Analysis	4	EET120	
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130	
EET232	Industrial Electronics	4	EET123	
EET128	NEC & Electrical Systems Design	2	EET122	
	TOTAL CREDIT HOURS	**23**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
EET120	DC Circuit Analysis	4	Co-MTH135
		9	
Second Semester			
EET122	AC Circuit Analysis	4	EET120
EET123	Electronic Devices & Circuits	4	EET120 **or** EST130
		8	
Third Semester			
EET232	Industrial Electronics	4	EET123
EET128	NEC & Electrical Systems Design	2	EET122
		6	
	TOTAL CREDITS	**23**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

Revised 2/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4452

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – BASICS OF SUSTAINABLE/ALTERNATIVE ENERGY TECHNOLOGIES

(SOLAR, WIND, FUEL, BIOMASS)

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AET121	Sustainable/Alternative Energy Sources	3		
AET122	Analysis/Applications of Sustainable Alternative Energy	3	AET121	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
	TOTAL CREDIT HOURS	**14**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
AET121	Sustainable/Alternative Energy Sources	3	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
		11	
Second Semester			
AET122	Analysis/Applications of Sustainable Alternative Energy	**3**	AET121
	TOTAL CREDITS	**14**	

^Based upon SSC placement score.
++Minimum Grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4453

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – ENVIRONMENTAL REMEDIATION TECHNICIAN

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENV121	Regulations and Compliance	3		
ENV124	Transportation Hazardous Materials Training	1		
ENV164	Sustainable Green Building Technology	3		
ENV165	OSHA 10-Hour Construction Safety	1		
ENV169	Radiation Safety	2		
ENV221	OSHA 40-Hour HAZWOPER	2		
ENV228	Health and Safety	3	ENV121	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ELECTIVE: Select one (1) course below.				
PHL122	Ethics	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
	TOTAL CREDIT HOURS	**21**		

^Based on SSC placement scores.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – ENVIRONMENTAL REMEDIATION TECHNICIAN

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
ENV121	Regulations and Compliance	3	
ENV124	Transportation Hazardous Materials Training	1	
ENV164	Sustainable Green Building Technology	3	
ENV165	OSHA 10-Hour Construction Safety	1	
ENG124	College Composition^	3	ENG011 **or** Proficiency
		11	
Second Semester			
ENV169	Radiation Safety	2	
ENV221	OSHA 40-Hour HAZWOPER	2	
ENV228	Health and Safety	3	ENV121
*Elective**		3	*Check for pre-requisites*
		10	
	TOTAL CREDITS	**21**	

^Based upon SSC placement score.

*Electives: PHL122, PSY121, SOC121

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4454

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – OSHA 40-HOUR HAZWOPER

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENV121	Regulations and Compliance	3		
ENV221	OSHA 40-Hour HAZWOPER	2		
	TOTAL CREDIT HOURS	**5**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ENV121	Regulations and Compliance	3	
ENV221	OSHA 40-Hour HAZWOPER	2	
	TOTAL CREDITS	**5**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4460

OIL AND GAS TECHNOLOGY – CDL

(COMMERCIAL DRIVER'S LICENSE)

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CDL121	Commercial Driver's License Class A – Safe Operation and Control*	5	Co-CDL122 **and** Co-CDL123	
CDL122	Commercial Driver's License Class A – Advanced Operations and Maintenance	6	Co-CDL121 **and** Co-CDL123	
CDL123	Commercial Driver's License Class A – Behind the Wheel Street	2	Co-CDL121 **and** Co-CDL122	
	TOTAL CREDIT HOURS	**13**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CDL121	Commercial Driver's License Class A – Safe Operation and Control++	5	Co-CDL122 and Co-CDL123
CDL122	Commercial Driver's License Class A – Advanced Operations and Maintenance	6	Co-CDL121 and Co-CDL123
CDL123	Commercial Driver's License Class A – Behind the Wheel Street	2	Co-CDL121 and Co-CDL122
	TOTAL CREDITS	**13**	

*Participation in CDL121 requires a valid Ohio driver's license with 2 years' driving experience. Must be 18 years of age and show proof of citizenship. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen. (**Cost is $4,200.)**

Students must pass the Ohio CDL Class A Driver's License examination to receive their Class A CDL. The examination is administered at the end of CDL123.

Revised 2/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4461

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – DEPARTMENT OF TRANSPORTATION (DOT) SAFETY CERTIFICATE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENV121	Regulations and Compliance	3		
ENV124	Transportation Hazardous Materials Training	1		
	TOTAL CREDIT HOURS	**4**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ENV121	Regulations and Compliance	3	
ENV124	Transportation Hazardous Materials Training	1	
	TOTAL CREDITS	**4**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4502

HEATING, VENTILATING AND AIR CONDITIONING TECHNOLOGY – COMMERCIAL REFRIGERATION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC234	HVAC Electrical Systems and Applications^	3	(MTH093 and MTH094)++ **or** Proficiency	
HVC235	Refrigeration	3	HVC122	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
	TOTAL CREDIT HOURS	**10**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
HVC234	HVAC Electrical Systems and Applications^	3	(MTH093 and MTH094)++ **or** Proficiency
HVC235	Refrigeration	3	HVC122
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
	TOTAL CREDITS	**10**	

^Based upon SSC placement score.

++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4503

HEATING, VENTILATING AND AIR CONDITIONING TECHNOLOGY – HVAC DESIGN AND APPLICATION TECHNICIAN

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials and Construction Methods	3		
HVC222	HVAC Design and Application	3	HVC122	
HVC232	Advanced HVAC Applications	3	HVC222 **and** HVC227	
HVC235	Refrigeration	3	HVC122	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CET121	Building Materials and Construction Methods	3	
HVC222	HVAC Design and Application	3	HVC122
HVC235	Refrigeration	3	HVC122
		9	
Second Semester			
HVC232	Advanced HVAC Applications	**3**	HVC222 **and** HVC227
	TOTAL CREDITS	**12**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4504

HEATING, VENTILATING AND AIR CONDITIONING TECHNOLOGY – HVAC/R ELECTRICAL SYSTEMS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC234	HVAC Electrical Systems and Applications^	3	(MTH093 and MTH094)++ **or** Proficiency	
HVC236	Advanced HVAC Electrical Applications	3	HVC234	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
	TOTAL CREDIT HOURS	**10**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
HVC234	HVAC Electrical Systems and Applications^	3	(MTH093 and MTH094)++ **or** Proficiency
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
		7	
Second Semester			
HVC236	Advanced HVAC Electrical Applications	**3**	HVC234
	TOTAL CREDITS	**10**	

^Based upon SSC placement score.

++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4505

HEATING, VENTILATING AND AIR CONDITIONING TECHNOLOGY – HVAC TECHNICIAN (LEVEL I)

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC121	HVAC Principles I	3		
HVC122	HVAC Principles II	3	Co-HVC121	
HVC227	HVAC Field Installation Techniques and Procedures	4	Co-HVC122	
HVC234	HVAC Electrical Systems and Applications^	3	(MTH093 and MTH094)++ **or** Proficiency	
	TOTAL CREDIT HOURS	**13**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
HVC121	HVAC Principles I	3	
HVC122	HVAC Principles II	3	Co-HVC121
HVC227	HVAC Field Installation Techniques and Procedures	4	Co-HVC122
HVC234	HVAC Electrical Systems and Applications^	3	(MTH093 and MTH094)++ **or** Proficiency
	TOTAL CREDITS	**13**	

^Based upon SSC placement score.

++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4506

HEATING, VENTILATING AND AIR CONDITIONING TECHNOLOGY – HVAC TECHNICIAN (LEVEL II)

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC222	HVAC Design and Application	3	HVC122	
HVC223	HVAC System Operation and Troubleshooting – Heating	3	HVC122	
HVC224	HVAC System Operation and Troubleshooting – Cooling	3	HVC122	
MST121	Blueprint Reading	2		
MST126	Pipefitting Principles and Applications	4		
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
HVC222	HVAC Design and Application	3	HVC122
MST121	Blueprint Reading	2	
MST126	Pipefitting Principles and Applications	4	
		9	
Second Semester			
HVC223	HVAC System Operation and Troubleshooting – Heating	3	HVC122
HVC224	HVAC System Operation and Troubleshooting – Cooling	3	HVC122
		6	
	TOTAL CREDITS	**15**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4553

APPLIED INDUSTRIAL TECHNOLOGY – BASIC ROBOTICS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IET228	Introduction to Robotics	2		
EST130	Electrical Circuits & Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
MST221	Mechanical Drive Components	3		
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
EST130	Electrical Circuits & Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
IET228	Introduction to Robotics	2	
MST221	Mechanical Drive Components	3	
	TOTAL CREDITS	**12**	

^Based upon SSC placement score.
++Minimum grade of "C" required.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4554

APPLIED INDUSTRIAL TECHNOLOGY – AUTOMATION & ROBOTICS SPECIALIST

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
EST130	Electrical Circuits & Devices^	4	(MTH093 and MTH094)++ **or** Proficiency	
IET228	Introduction to Robotics	2		
AIT135	Industrial Robotics*	4	IET228	
	TOTAL CREDIT HOURS	**14**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
EST130	Electrical Circuits & Devices^	4	(MTH093 and MTH094)++ **or** Proficiency
IET228	Introduction to Robotics	2	
		10	
Second Semester			
AIT135	Industrial Robotics*	**4**	IET228
	TOTAL CREDITS	**14**	

^Based upon SSC placement score.
++Minimum grade of "C" required.
*FANUC Automation and Robotics certification can be obtained at course completion for an additional fee.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4567

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – GREEN TECHNOLOGY ESSENTIALS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO126	Science, Energy and the Environment	4		
ENV164	Sustainable Green Building Technology	3		
	TOTAL CREDIT HOURS	**7**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
BIO126	Science, Energy and the Environment	4	
ENV164	Sustainable Green Building Technology	3	
	TOTAL CREDITS	**7**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4602

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – BASIC ENVIRONMENTAL TECHNICIAN

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENV123	OSHA 10-Hour General Industry Safety	1		
ENV124	Transportation Hazardous Materials Training	1		
ENV169	Radiation Safety	2		
ENV221	OSHA 40-Hour HAZWOPER	2		
	TOTAL CREDIT HOURS	**6**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ENV123	OSHA 10-Hour General Industry Safety	1	
ENV124	Transportation Hazardous Materials Training	1	
ENV169	Radiation Safety	2	
ENV221	OSHA 40-Hour HAZWOPER	2	
	TOTAL CREDITS	**6**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

4607

ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – ENVIRONMENTAL TECHNICIAN SUPERVISOR

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENV121	Regulations and Compliance	3		
ENV124	Transportation Hazardous Materials Training	1		
ENV169	Radiation Safety	2		
ENV221	OSHA 40-Hour HAZWOPER	2		
ENV231	OSHA 30-Hour General Industry	2		
	TOTAL CREDIT HOURS	**10**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ENV121	Regulations and Compliance	3	
ENV124	Transportation Hazardous Materials Training	1	
ENV169	Radiation Safety	2	
ENV221	OSHA 40-Hour HAZWOPER	2	
ENV231	OSHA 30-Hour General Industry	2	
	TOTAL CREDITS	**10**	

HEALTH AND HUMAN SERVICES

In an effort to meet the needs of students, courses required in each of the programs are scheduled in sequence to accommodate those attending on a full-time or part-time basis. All students should consult their academic advisors to plan their schedules and course sequence appropriately. In order to keep pace with progress, the College reserves the right to change fees, academic programs, course descriptions, or any other statements, contained in this catalog at the discretion of the College or its Board of Trustees.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF SCIENCE

3425

DENTAL ASSISTING

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DAS121	Dental Assisting Techniques I**	3		
DAS122	Dental Assisting Radiography	2		
DAS123	Dental Assisting Techniques II	3	DAS121	
DAS124	Dental Assisting Materials	2		
DAS125	Dental Assisting Specialty#	3	DAS123	
DAS128	Intro to Dental Terminology & Basic Anatomy	2		
	Total	**15**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
PHL122	Ethics	3		
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
MTH125 **or** MTH124	College Algebra^ **or** Statistics^	3-4	(MTH093 and MTH094)++ **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOC225	Cultural Diversity	3		
ENG230	Business Communication	3	ENG124	
	*Literature or History Elective**	3	ENG124	
	Total	**50-51**		
	TOTAL CREDIT HOURS	**65-66**		

^Based upon SSC placement score

^^To promote student success, this course should be taken in the first semester

++Minimum grade of "C" required

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#Applicants may select a dental assisting course option in which to gain specialized skills: Dental Office Management, Community Dentistry or Clinical Dental Assisting. Required course in the Associate of Science Degree in Dental Assisting.

*Student may select any literature or history course 3 credit hours or more.

**Course may be taken in conjunction with other technical courses, but must be taken in the first semester of technical course work.

Minimum grade of "C" in all technical courses is required.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

DENTAL ASSISTING

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
DAS121	Dental Assisting Techniques I**	3	
DAS122	Dental Assisting Radiography	2	
MTH125 **or** MTH124	College Algebra^ **or** Statistics^	4-3	(MTH093 or MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
DAS128	Intro to Dental Terminology & Basic Anatomy	2	
		14/15	
Second Semester			
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
SOC121	Sociology^	3	IDS102 **or** Proficiency
DAS123	Dental Assisting Techniques II	3	DAS121
DAS124	Dental Assisting Materials	2	
		15	
Third Semester			
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
DAS125	Dental Assisting Specialty#	3	DAS123
		9	
Fourth Semester			
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency
COM121	Effective Speaking	3	
SOC225	Cultural Diversity	3	
*Literature or History Elective**		3	ENG124
		13	
Fifth Semester			
BUS121	Business Administration^	4	IDS102 **or** Proficiency
PHL122	Ethics	3	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123
ENG230	Business Communication	3	ENG124
		14	
	TOTAL CREDITS	**65-66**	

^Based upon SSC placement score

^^To promote student success, this course should be taken in the first semester

++Minimum grade of "C" required

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#Applicants may select a dental assisting course option in which to gain specialized skills: Dental Office Management, Community Dentistry or Clinical Dental Assisting. Required course in the Associate of Science Degree in Dental Assisting.

*Student may select any literature or history course 3 credit hours or more.

**Course may be taken in conjunction with other technical courses, but must be taken in the first semester of technical course work.

Minimum grade of "C" in all technical courses is required.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

3400

DENTAL HYGIENE

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DHY121	Head, Neck & Oral Anatomy	2		
DHY122	Oral Histology & Embryology	1		
DHY123	Dental Radiography	3	Co-DHY121	
DHY124	Periodontics I	2	DHY122	
DHY125	Dental Materials	3	DHY131	
DHY126	Pathology	2	DHY122	
DHY127	Community Oral Health I	1		
DHY131	Fundamentals of Dental Hygiene Practice	4		
DHY132	Dental Hygiene Theory I	2	DHY131 **and** Co-DHY133	
DHY133	Clinical Dental Hygiene I	2	DHY131 **and** DHY123 **and** Co-DHY132	
DHY134	Clinical Dental Hygiene IA	1	DHY133	
DHY221	Nutrition in Dentistry	1	DHY132	
DHY222	Dental Pharmacology	2	BIO221 **and** DHY126	
DHY223	Community Oral Health II	1	DHY127 **and** DHY134	
DHY224	Periodontics II	1	DHY124	
DHY225	Anesthesia & Pain Control	2	BIO122 **and** DHY121 **and** DHY132	
DHY231	Dental Hygiene Theory II	1	DHY132 **and** Co-DHY232	
DHY232	Clinical Dental Hygiene II	4	DHY134 **and** Co-DHY231	
DHY233	Dental Hygiene Theory III	2	DHY231 **and** Co-DHY234	
DHY234	Clinical Dental Hygiene III	5	DHY232 **and** Co-DHY233	
	Total	**42**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO221	Principles of Microbiology (lab)#	4	BIO122 **or** BIO123 **or** BIO141	
CHM121	Gen., Org., & Bio., Chemistry I (lab)⅄	4	HS CHM **or** CHM101	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
	Total	**31**		
	TOTAL CREDIT HOURS	**73**		

^Based on SSC placement scores

++Minimum grade of "C" required.

#May not be taken earlier than 3 years prior to enrollment in DHY121.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Minimum grade of "C" in all technical courses is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

DENTAL HYGIENE

Effective Summer 2014

Pre-Eligibility Courses		Credit Hours	Pre- and Co-Requisites
CHM121	Gen., Org., & Bio., Chemistry I (lab)⅄	4	HS CHM **or** CHM101
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		14	
First Semester			
DHY121	Head, Neck & Oral Anatomy	2	
DHY122	Oral Histology & Embryology	1	
DHY123	Dental Radiography	3	Co-DHY121
DHY131	Fundamentals of DH Practice	4	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123
		14	
Second Semester			
DHY124	Periodontics I	2	DHY122
DHY125	Dental Materials	3	DHY131
DHY126	Pathology	2	DHY122
DHY132	Dental Hygiene Theory I	2	DHY131 **and** Co-DHY133
DHY133	Clinical Dental Hygiene I	2	DHY131 **and** DHY123 **and** Co-DHY132
BIO221	Principles of Microbiology (lab)#	4	BIO122 **or** BIO123 **or** BIO141
		15	
Summer Semester			
DHY127	Community Oral Health I	1	
DHY134	Clinical Dental Hygiene IA	1	DHY133
DHY221	Nutrition in Dentistry	1	DHY132
MTH124	Statistics^	3	(MTH093 and MTH094)++
		6	**or** Proficiency
Third Semester			
SOC121	Sociology^	3	IDS102 **or** Proficiency
DHY222	Dental Pharmacology	2	BIO221 **and** DHY126
DHY223	Community Oral Health II	1	DHY127 **and** DHY134
DHY225	Anesthesia & Pain Control	2	BIO122 **and** DHY121 **and** DHY132
DHY231	Dental Hygiene Theory II	1	DHY132 **and** Co-DHY232
DHY232	Clinical Dental Hygiene II	4	DHY134 **and** Co-DHY231
		13	
Fourth Semester			
COM121	Effective Speaking	3	
DHY224	Periodontics II	1	DHY124
DHY233	Dental Hygiene Theory III	2	DHY231 **and** Co-DHY234
DHY234	Clinical Dental Hygiene III	5	DHY232 **and** Co-DHY233
		11	
	TOTAL CREDITS	**73**	

^Based on SSC placement scores

++Minimum grade of "C" required.

#May not be taken earlier than 3 years prior to enrollment in DHY121.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Minimum grade of "C" in all technical courses is required.

Revised 02/2014

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF SCIENCE

3562

DIETARY MANAGER

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DMA121	ServSafe	1	Co-DMA122	
DMA122	ServSafe Experience	1	Co-DMA121	
DMA123	Nutrition/Medical Nutrition Therapy for Dietary Manager	3	Co-DMA124	
DMA124	Nutrition/MNT For Dietary Manager Experience	3	Co-DMA123	
DMA125	Management of Foodservice Operations for the Dietary Manager	3	Co-DMA126	
DMA126	Management of Foodservice Operations for the Managers Experience	3	Co-DMA125	
DMA127	Dietary Operations Delivery	3	Co-DMA128	
DMA128	Dietary Operation Delivery Experience	3	Co-DMA127	
	Total	**20**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO123	Principles of Human Structure and Functions (lab)#	5	BIO101 **or** BIO127	
BIO125	Medical Terminology	3		
CHM101	Introduction to Chemistry^⍋	4	(MTH093 and MTH094) **or** Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
PHL122	Ethics	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity	3		
ENG233 **or** HIS121	British Literature Med to 1785 **or** US History 1- to 1877	3	ENG124	
	Total	**44**		
	TOTAL CREDIT HOURS	**64**		

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

⍋Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#BIO121 and BIO122 may be substituted for BIO123

The student has the option of taking classes during the summer. Field experience can be arranged with permission. This coursework is in compliance with the requirements of the Dietary Manager's Association and upon completion the student is eligible to take the national certification examination.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

DIETARY MANAGER

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH125	College Algebra^	4	(MTH093 and MTH094) **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
PSY121	General Psychology^	3	IDS 102 **or** Proficiency
DMA121	ServSafe	1	Co-DMA122
DMA122	ServSafe Experience	1	Co- DMA121
BIO125	Medical Terminology	3	
SOC121	Sociology^	3	IDS102 **or** Proficiency
		19	
Second Semester			
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency
ENG221	Technical Report Writing	3	ENG124
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
DMA123	Nutrition/Medical Nutrition Therapy	3	Co-DMA124
DMA124	Nutrition/MNT Therapy Experience	3	Co-DMA123
		16	
Third Semester			
BIO123	Principles of Human Structure and Functions (lab)#	5	BIO101 **or** BIO121
COM121	Effective Speaking	3	
DMA125	Management of Food Service Operations	3	Co-DMA126
DMA126	Management of Food Service Operations Experience	3	Co-DMA125
		14	
Fourth Semester			
DMA127	Dietary Operations Delivery	3	Co-DMA128
DMA128	Dietary Operations Delivery Experience	3	Co-DMA127
PHL122	Ethics	3	
SOC225	Cultural Diversity	3	
ENG233	British Literature Med to 1785		
or	**or**		
HIS121	US History 1 – to 1877	3	ENG124
		15	
	TOTAL CREDITS	**64**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#BIO121 and BIO122 may be substituted for BIO123

The student has the option of taking classes during the summer. Field experience can be arranged with permission. This coursework is in compliance with the requirements of the Dietary Manager's Association and upon completion the student is eligible to take the national certification examination.

HEALTH AND HUMAN SERVICES DIVISION
ONE-YEAR CERTIFICATE

3564

DIETARY MANAGER (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DMA121	ServSafe	1	Co-DMA122	
DMA122	ServSafe Experience	1	Co-DMA121	
DMA123	Nutrition/Medical Nutrition Therapy for Dietary Manager	3	Co-DMA124	
DMA124	Nutrition/ MNT Therapy for Dietary Managers Experience	3	Co-DMA123	
DMA125	Management of Foodservice Operations for the Dietary Manager	3	Co-DMA126	
DMA126	Management of Foodservice Operations for the Managers Experience	3	Co-DMA125	
DMA127	Dietary Operations Delivery	3	Co-DMA128	
DMA128	Dietary Operations Delivery Experience	3	Co-DMA127	
	Total	**20**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1		
BIO101 **or** BIO127	Introduction to Anatomy and Physiology^ **or** Human Biology (lab)^	3-4	IDS102 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM101	Introduction to Chemistry^⍋	4	(MTH093 and MTH094)++ **or** Proficiency	
	*Arts & Humanities Elective**	3-4		
	Total	**18-20**		
	TOTAL CREDIT HOURS	**38-40**		

^Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

⍋Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Suggested Electives for students desiring to continue toward the Associate of Science for the Dietary Manager or Dietetic Technician Programs – Arts & Humanities Elective: COM121, PSY121, SOC225, PHL122 or BUS121

The student has the option of taking classes during the summer. Field experience can be arranged with permission.

This coursework is in compliance with the requirements of the Dietary Manager's Association and upon completion the student is eligible to take the national certification examination.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in one year.

DIETARY MANAGER (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
DMA121	ServSafe	1	Co-DMA122
DMA122	ServSafe Experience	1	Co-DMA121
DMA123	Nutrition/ Medical Nutrition Therapy	3	Co-DMA124
DMA124	Nutrition /Medical Nutrition Therapy Experience	3	Co-DMA123
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		16	
Second Semester			
DMA125	Management of Foodservice Operations	3	Co-DMA126
DMA126	Management of Foodservice Operations Experience	3	Co-DMA125
BIO101	Introduction to Anatomy and Physiology^		
or	**or**		
BIO127	Human Biology (lab)^	3-4	IDS102 **or** Proficiency
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency
		13-14	
Third Semester			
DMA127	Dietary Operations Delivery	3	Co-DMA128
DMA128	Dietary Operations Delivery Experience	3	Co-DMA127
*Arts & Humanities Elective**		3-4	
		9-10	
	TOTAL CREDITS	**38-40**	

^Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Suggested Electives for students desiring to continue toward the Associate of Science for the Dietary Manager or Dietetic Technician Programs – Arts & Humanities Elective: COM121, PSY121, SOC225, PHL122 or BUS121

The student has the option of taking classes during the summer. Field experience can be arranged with permission.

This coursework is in compliance with the requirements of the Dietary Manager's Association and upon completion the student is eligible to take the national certification examination.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF SCIENCE

3560

DIETETIC TECHNICIAN

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENGLISH COMPOSITION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG105 **or** Proficiency	
ENG221	Technical Report Writing **(required)**	3	ENG124	
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours minimum***				
PSY121	General Psychology^ **(required)**	3	IDS102 **or** Proficiency	
SOC121	Sociology^ **(required)**	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity **(required)**	3		
ARTS & HUMANITIES: ***9 credit hours minimum***				
COM121	Effective Speaking **(required)**	3		
PHL122	Ethics **(required)**	3		
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
HIS121	U.S. History I – to 1877	3		
HIS122	U. S. History II – from 1877	3		
SCIENCES & MATHEMATICS: 13 credits minimum				
BIO123	Principles of Human Structure and Function (lab)# **(required)**	5	BIO101 **or** BIO127	
BIO221	Principles of Microbiology (lab) **(required)**	4	BIO122 **or** BIO123 **or** BIO141	
MTH125	College Algebra **(required)^**	4	(MTH093 and MTH094)++ **or** Proficiency	
	Total	**37**		

^Based on SSC placement scores.
++Minimum grade of "C" required.
#BIO121 and BIO122 can be substituted for BIO123.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AREA OF CONCENTRATION COURSES: ***All required.***				
DMA121	ServSafe	1		
NTR121	Basic Medical Nutrition^	3	IDS102 **or** Proficiency	
DTR121	Food Science Principles	3	CHM101 **or** One-Year HS CHM with "B" or higher	
DTR122	Life Cycle Nutrition	3	NTR121	
DTR123	Applied Nutrition	2	NTR121 **and** Co-DTR221 **and** DTR223	
DTR221	Medical Nutrition Therapy	3	NTR121 **and** Co-DTR123 **and** DTR223	
DTR223	Nutrition/MNT Directed Practice	2	Co-DTR123 **and** DTR221	
DTR224	Cultural Nutrition	2	DTR221	
DTR225	Community Nutrition	3	DTR221 **and** Co-DTR226	
DTR226	Community Nutrition Directed Practice	2	Co-DTR225	
DTR227	Foodservice Operations I	3	DTR121 **and** Co-DMA121 **and** DTR228	
DTR228	Dietary Systems	3	Co-DTR227	
DTR229	Professional Dietetics	1	DTR228	
DTR230	Foodservice Operations II	3	DTR227 **and** Co-DTR231	
DTR231	Foodservice Directed Practice	2	Co-DTR230	
	Total	**36**		
	TOTAL CREDIT HOURS	**73**		

^Based on SSC placement scores.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides a scheduling option for full-time associate degree students who plan to finish in two years.

DIETETIC TECHNICIAN

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101 or BIO127
COM121	Effective Speaking	3	
*Art & Humanities Elective**		3	
NTR121	Basic Medical Nutrition^	3	IDS 102 **or** Proficiency
DTR121	Food Science Principles	3	HS CHM **or** CHM101
		17	
Second Semester			
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
ENG124	College Composition^	3	ENG105 **or** Proficiency
DTR122	Life Cycle Nutrition	3	NTR121
DTR123	Applied Nutrition	2	NTR121, Co-DTR221 **and** Co-DTR223
DTR221	Medical Nutrition Therapy	3	NTR121, Co-DTR123 **and** Co-DTR223
DTR223	Nutrition/MNT Directed Practice	2	Co-DTR123 **and** Co-DTR221
		17	
Third Semester			
ENG221	Technical Report Writing	3	ENG124
PSY121	General Psychology^	3	IDS102 **or** Proficiency
		6	
Fourth Semester			
SOC225	Cultural Diversity	3	
DTR224	Cultural Nutrition	2	DTR221
DTR225	Community Nutrition	3	DTR221 **and** Co-DTR226
DTR226	Community Nutrition Directed Practice	2	Co-DTR225
DTR227	Foodservice Operations I	3	DTR121, Co-DMA121 **and** Co-DTR228
DMA121	ServSafe	1	
DTR228	Dietary Systems	3	Co-DTR227
		17	
Fifth Semester			
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141
SOC121	Sociology^	3	IDS102 **or** Proficiency
PHL122	Ethics	3	
DTR229	Professional Dietetics	1	DTR228
DTR230	Foodservice Operations II	3	DTR227 **and** Co-DTR231
DTR231	Foodservice Directed Practice	2	Co-DTR230
		16	
	TOTAL CREDITS	**73**	

^Based on SSC placement scores.

++Minimum grade of "C" required.

#BIO121 and BIO122 can be substituted for BIO123

480 hours of supervised practice, as required by the ADA to meet the minimum of 450 hours. Prerequisites for entry into the program, as well as courses, are based upon SSC test placement or high school scores: Introduction to Anatomy and Physiology (BIO121), Introduction to Chemistry (CHM101), Intermediate Algebra I and II (MTH093 and MTH094), and College Writing III (ENG105).

Upon completion of class work and field experience the student is eligible to apply to the American Dietetic Association for eligibility to take the examination to become a Registered Dietetic Technician.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

3554

EMERGENCY FIRE SERVICES

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EMS122	Paramedic I	9	BIO101 **and** EMS121 **and** Co-EMS124	
EMS124	Paramedic I Clinical	2	BIO101 **and** EMS121 **and** Co-EMS122	
EMS221	Paramedic II	9	EMS122 **and** EMS124 **and** Co-EMS223	
EMS223	Paramedic II Clinical	2	EMS122 **and** EMS124 **and** Co-EMS221	
EMS222	Paramedic III	4	EMS221 **and** EMS223	
EMS224	Paramedic IV	4	EMS222	
FST228 **or** FST129 and FST230 **or** FST128 and FST 229 and FST 230	Fire Fighter 1 & 2++ **or** Take the Firefighter sequence of courses to obtain Firefighter Level 2 certification (Firefighter 1 and Firefighter 2)++ **or** Take the Firefighter sequence of courses to obtain Firefighter Level 2 certification (Volunteer, Firefighter 1Transition and Firefighter 2)++	11		
	Total	**41**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
EMS121	Emergency Medical Technician+#	7		
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 **or** Proficiency	
COM122	Interpersonal Communication	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
PHL122	Ethics	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
	Total	**30**		
	TOTAL CREDIT HOURS	**71**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
++Minimum grade of "C" required.
#EMS121 is a prerequisite for EMS122. A student can waive this course by showing proof of current State of Ohio EMT Certification. This certification is required for enrollment to the paramedic program.

Contact Fire Program Coordinator for equipment needs.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides a scheduling option for full-time associate degree students who plan to finish in two years.

EMERGENCY FIRE SERVICES

Effective Summer 2014

Summer		Credit Hours	Pre and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
EMS121	Emergency Medical Technician+#	7	
BIO101	Introduction to Anatomy & Physiology^+	3	IDS102 **or** Proficiency
		11	
First Semester			
EMS122	Paramedic I	9	BIO101 **and** EMS121 **and** Co-EMS124
EMS124	Paramedic I Clinical	2	BIO101 **and** EMS121 **and** Co-EMS122
		11	
Second Semester			
EMS221	Paramedic II	9	EMS122 **and** EMS124 **and** Co-EMS223
EMS223	Paramedic II Clinical	2	EMS122 **and** EMS124 **and** Co-EMS221
ENG124	College Composition^	3	ENG011 **or** Proficiency
		14	
Summer			
EMS222	Paramedic III	4	EMS221 **and** EMS223
ITD122	Computer Applications for Professionals^	3	IDT100 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
		10	
Third Semester			
EMS224	Paramedic IV	4	EMS222
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
COM122	Interpersonal Communication	3	
		11	
Fourth Semester			
FST228	Firefighter 1 & 2++	11	
PHL122	Ethics	3	
		14	
	Total Credits	**71**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
++Minimum grade of "C" required.
#EMS121 is a prerequisite for EMS122. A student can waive this course by showing proof of current State of Ohio EMT Certification. This certification is required for enrollment to the paramedic program.

Contact Fire Program Coordinator for equipment needs.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

3551

EMERGENCY MEDICAL SERVICES

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EMS122	Paramedic I+	9	BIO101 **and** EMS121 **and** Co-EMS124	
EMS124	Paramedic I Clinical+	2	BIO101 **and** EMS121 **and** Co-EMS122	
EMS221	Paramedic II+	9	EMS122 **and** EMS124 **and** Co-EMS223	
EMS223	Paramedic II Clinical+	2	EMS122 **and** EMS124 **and** Co-EMS221	
EMS222	Paramedic III+	4	EMS221 **and** EMS223	
EMS224	Paramedic IV+	4	EMS222	
FST224	Legal Aspects of Fire Service	2		
	Total	**32**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
EMS121	Emergency Medical Technician+ #	7		
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 **or** Proficiency	
COM122	Interpersonal Communication	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
PHL122	Ethics	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
BIO125	Medical Terminology	3		
HIT230	Healthcare Delivery in the US	2		
	Total	**35**		
	TOTAL CREDIT HOURS	**67**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
++Minimum grade of "C" required.
#EMS121 is a prerequisite for EMS122. A student can waive this course by showing proof of current State of Ohio EMT Certification. This certification is required for enrollment to the paramedic program.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides a scheduling option for full-time associate degree students who plan to finish in two years.

EMERGENCY MEDICAL SERVICES

Effective Summer 2014

Summer		**Credit Hours**	**Pre and Co-requisites**
SSC101	Student Success Seminar^^	1	*Take first semester*
EMS121	Emergency Medical Technician+#	7	
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 **or** Proficiency
		11	
First Semester			
EMS122	Paramedic I+	9	BIO101 **and** EMS121 **and** Co-EMS124
EMS124	Paramedic I Clinical+	2	BIO101 **and** EMS121 **and** Co-EMS122
FST224	Legal Aspects of Fire Service	2	
		13	
Second Semester			
EMS221	Paramedic II+	9	EMS122 **and** EMS124 **and** Co-EMS223
EMS223	Paramedic II Clinical+	2	EMS122 **and** EMS124 **and** Co-EMS221
ENG124	College Composition ^	3	ENG011 **or** Proficiency
		14	
Summer			
EMS222	Paramedic III+	4	EMS221 **and** EMS223
BIO125	Medical Terminology	3	
		7	
Third Semester			
EMS224	Paramedic IV+	4	EMS222
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
COM122	Interpersonal Communication	3	
		11	
Fourth Semester			
ITD122	Computer Applications for Professionals^	3	IDT100 **or** Proficiency
PSY121	General Psychology ^	3	IDS102 **or** Proficiency
HIT230	Healthcare Delivery in the US	2	
PHL122	Ethics	3	
		11	
	Total Credits	**67**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

#EMS121 is a prerequisite for EMS122. A student can waive this course by showing proof of current State of Ohio EMT Certification. This certification is required for enrollment to the paramedic program.

HEALTH AND HUMAN SERVICES DIVISION
ASSOCIATE OF TECHNICAL STUDIES

3420

EXPANDED FUNCTIONS DENTAL AUXILIARY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DAS226	Expanded Dental Assisting I	1	Co-DAS227	
DAS227	Expanded Dental Assisting II	2	Co-DAS226	
DAS228	Directed Clinical Practice	4	DAS226 **and** DAS227	
DAS128	Intro to Dental Terminology & Basic Anatomy	2		
	Total	**9**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IDS115	College Success Skills^^	3		
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
CHM121	Gen., Org., and Bio. Chemistry I (lab)⅄	4	HS CHM **or** CHM101	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125 **or** MTH124	College Algebra^ **or** Statistics^**	4-3	(MTH093 and MTH094)++ **or** Proficiency	
PHL122	Ethics	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
	*Social Science Elective**	3	*Check for pre-requisites*	
	Total	**56-57**		
	TOTAL CREDIT HOURS	**65-66**		

^Based on SSC placement scores

^^ To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*****May select any PSY or SOC course of three credit hours or more or SWK127.

**Students who begin taking technical courses summer 2013 and after will be required to take MTH125 "College Algebra" or MTH124 "Statistics".

Minimum grade of "C" in all technical courses is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

EXPANDED FUNCTIONS DENTAL AUXILIARY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
IDS115	College Success Skills^^	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
DAS128	Intro to Dental Terminology & Basic Anatomy	2	
		14	
Second Semester			
BUS121	Business Administration^	4	IDS102 **or** Proficiency
DAS226	Expanded Dental Assisting I	1	Co-DAS227
DAS227	Expanded Dental Assisting II	2	Co-DAS226
		7	
Third Semester			
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency
SOC121	Sociology^	3	IDS102 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
DAS228	Directed Clinical Practice	4	DAS226 **and** DAS227
MTH125 **or** MTH124	College Algebra^ **or** Statistics^**	4-3	(MTH093 & MTH094)++
		17-18	**or** Proficiency
Fourth Semester			
CHM121	Gen., Org., and Bio., Chemistry I (lab)⅄	4	HS CHM **or** CHM101
COM121	Effective Speaking	3	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123
*Social Science Elective******		3	*Check for pre-requisites*
		14	
Fifth Semester			
PHL122	Ethics	3	
COM122	Interpersonal Communication	3	
BIO124	Human Diseases	3	BIO122 **or** BIO123
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141
		13	
	TOTAL CREDITS	**65-66**	

^Based on SSC placement scores

^^ To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*****May select any PSY or SOC course of three credit hours or more or SWK127.

**Students who begin taking technical courses Summer 2013 and after will be required to take MTH125 "College Algebra" or MTH124 "Statistics".

Minimum grade of "C" in all technical courses is required.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

3050

HEALTH INFORMATION MANAGEMENT – Day Track

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HIT121	Health Data Management and Delivery Systems	4	Co-HIT123	
HIT122	Alternative Health Records and Registries	3	HIT121	
HIT123	Healthcare Legal and Ethical Issues*	2	HIT230 **or** Co-HIT121	
HIT124	Clinical Classification Systems I	4	(HIT121 **or** BIO122 **or** BIO123) **and** Co-BIO124	
HIT221	Clinical Classification Systems II	3	HIT124 **and** BIO222	
HIT222	Healthcare Statistics and Research	3	HIT122 **and** HIT124 **and** Co-HIT224	
HIT223	HIM Supervision Concepts and Practices	3	HIT224 **and** Co-ENG222	
HIT224	Quality Management in Healthcare	2	Co-HIT222	
HIT226	Professional Practice Experience I/Seminar I	3		
HIT227	Professional Practice Experience II/Seminar II	3		
HIT229	Health Information Systems and Technology	3	HIT224 **or** ITD122 **or** CIS126	
HIT232	Healthcare Reimbursement Methodologies	2	HIT124	
HIT233	Clinical Classification Systems III	2	HIT124	
	Total	**37**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101+ **or** BIO127	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO222	Pharmacology	3	BIO122 **or** BIO123	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG222	Health Information Writing	3	ENG124 **and** Co-HIT223	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH105	Math for Allied Health^ Ω	3	(MTH091 and MTH092) **or** Proficiency+	
	*Social Science Elective^* [1]	3	IDS102 **or** Proficiency	
	Communications Elective [2]	3		
	Total	**33**		
	TOTAL CREDIT HOURS	**70**		

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

#BIO121 and BIO122 may be substituted for BIO123.

*Students in the Health Information Management major are required to take HIT121. HIT230 is required for all other majors.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] May select from SOC and PSY offerings only.

[2] May select from COM offerings only.

Application criteria requires a "B" or better in BIO101 or HS BIO, and (MTH091 and MTH092) or proficiency to apply to the HIT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

HEALTH INFORMATION MANAGEMENT – Day Track

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
HIT121	Health Data Management and Delivery Systems	4	Co-HIT123
HIT123	Health Care Legal and Ethical Issues*	2	HIT230 **or** Co-HIT121
BIO123	Principles of Human Structure & Function (lab)#	5	BIO101+ **or** BIO127
BIO125	Medical Terminology	3	
		18	
Second Semester			
HIT122	Alternative Health Records & Registries	3	HIT121
HIT124	Clinical Classification Systems I	4	(HIT121 **or** BIO122 **or** BIO123) **and** Co-BIO124
BIO124	Human Diseases	3	BIO122 **or** BIO123
ENG124	College Composition^	3	ENG011 **or** Proficiency
BIO222	Pharmacology	3	BIO122 **or** BIO123
		16	
Summer			
MTH105	Math for Allied Health^ Ω	3	(MTH091 and MTH092) **or** Proficiency+
Social Science Elective [1]		3	
Communications Elective [2]		3	
		9	
Third Semester			
HIT221	Clinical Classification Systems II	3	HIT124 **and** BIO222
HIT222	Healthcare Statistics and Research	3	HIT122 **and** HIT124 **and** Co-HIT224
HIT224	Quality Management in Healthcare	2	Co-HIT222
HIT226	Professional Practice Experience I/Seminar I	3	
HIT232	Health Care Reimbursement Methodologies	2	HIT124
		13	
Fourth Semester			
ENG222	Health Information Writing	3	ENG124 **and** Co-HIT223
HIT223	HIM Supervision: Concepts and Practices	3	HIT224 **and** Co-ENG222
HIT227	Professional Practice Experience II/ Seminar II	3	
HIT229	Health Information Systems and Technology	3	HIT224 **or** ITD122 **or** CIS126
HIT233	Clinical Classification Systems III	2	HIT124
		14	
	TOTAL CREDITS	**70**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

#BIO121 and BIO122 may be substituted for BIO123.

*Students in the Health Information Management major are required to take HIT121. HIT230 is required for all other majors.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] May select from SOC and PSY offerings only.

[2] May select from COM offerings only.

Application criteria requires a "B" or better in BIO101 or HS BIO, and (MTH091 and MTH092) or Proficiency to apply to the HIT program. Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

ONE-YEAR CERTIFICATE

3055

MEDICAL CODING CERTIFICATE PROGRAM (One Year Certificate)

AFTERNOON/NIGHT TRACK

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HIT121	Health Data Management and Delivery Systems	4	Co-HIT123	
HIT123	Healthcare Legal and Ethical Issues*	2	HIT230 **or** Co-HIT121	
HIT124	Clinical Classification System I	4	HIT121 **and** (BIO122 or BIO123) **and** Co-BIO124	
HIT221	Clinical Classification Systems II▲	3	HIT124 **and** BIO222	
HIT233	Clinical Classification Systems III▲	2	HIT124	
HIT231	Coding Professional Practice Experience/Seminar**▲	1	HIT124	
HIT232	Healthcare Reimbursement Methodologies	2	HIT124	
	Total	**18**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101+ **or** BIO127	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO222	Pharmacology	3	BIO122 **or** BIO123	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
	Total	**18**		
	TOTAL CREDIT HOURS	**36**		

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

#BIO121 and BIO122 may be substituted for BIO123

*Students in the Health Information Management major are required to take HIT121. HIT230 is required for all other majors.

**The coding professional practice experience is on campus in our virtual lab.

▲The summer semester courses are accelerated and the schedule is rigorous.

Application criteria require a "B" or better in HS BIO or BIO101 to apply to the MC program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in one year.

MEDICAL CODING CERTIFICATE PROGRAM (One-Year Certificate)

AFTERNOON/NIGHT TRACK

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
HIT121	Health Data Management and Delivery Systems	4	Co-HIT123
HIT123	Healthcare Legal and Ethical Issues*	2	HIT230 **or** Co-HIT121
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101+ **or** BIO127
BIO125	Medical Terminology	3	
		15	
Second Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
HIT124	Clinical Classification System I	4	HIT121 **and** (BIO122 or BIO123) **and** Co-BIO124
BIO124	Human Diseases	3	BIO122 **or** BIO123
BIO222	Pharmacology	3	BIO122 **or** BIO123
HIT232	Healthcare Reimbursement Methodologies	2	HIT124
		15	
Summer			
HIT221	Clinical Classification Systems II▲	3	BIO222 **and** Co-HIT124
HIT233	Clinical Classification Systems III▲	2	HIT124
HIT231	Coding Professional Practice Experience/Seminar**▲	1	HIT124
		6	
	TOTAL CREDITS	**36**	

^Based on SSC placement scores
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
#BIO121 and BIO122 may be substituted for BIO123
*Students in the Health Information Management major are required to take HIT121. HIT230 is required for all other majors.
**The coding professional practice experience is on campus in our virtual lab.
▲The summer semester courses are accelerated and the schedule is rigorous.

Application criteria require a "B" or better in HS BIO or BIO101 to apply to the MC program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION
ASSOCIATE OF APPLIED SCIENCE

1000

HUMAN AND SOCIAL SERVICES

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SWK121	Introduction to Social Welfare++	3		
SWK124	Methods in Practice I++	3	SWK121	
SWK130	Methods in Practice II++	3	SWK124	
SWK125	Substance Abuse	3		
SWK126	Human Behavior in the Social Environment^	3		
SWK127	Group Processes++	3		
GER121	Introduction to Gerontology	3		
SWK224	Poverty in the U.S.++	3	SWK121	
SWK225	Victimization and Crisis Intervention	3		
SWK231	HSS Practicum & Seminar	3	SWK224 **and** SWK130	
	*Select one Technical Elective from the list below**	3		
	*Select one Technical Elective from the list below**	3		
	Total	**36**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
SOC123	Dynamics of the Family	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
BUS122	Basic Economics ^	3	IDS102 **or** Proficiency	
PSC121	Political Science	3		
SOC225	Cultural Diversity++	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121	Effective Speaking	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
BIO127	Human Biology (lab)	4		
	Total	**32**		
	TOTAL CREDIT HOURS	**68**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
***** *Technical Electives* –GER122, SOC121, SOC122, SOC124, SOC221, SOC222, PSY122, PSY123, PSY124, PSY125, PSY220, PSY221, SWK223, SWK 226, SWK230

Note: Students who successfully complete GER122 and SWK230 as their technical electives, or in addition to their technical electives, may apply for the gerontology option and/or certificate of competency.

Students are required to follow the program curriculum in effect when they begin taking technical courses, not when students are accepted to the College or program.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

HUMAN AND SOCIAL SERVICES

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
SWK121	Introduction to Social Welfare++	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
SOC123	Dynamics of the Family	3	
COM121	Effective Speaking	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		16	
Second Semester			
SWK124	Methods in Practice I++	3	SWK121
SWK224	Poverty in the U.S.++	3	SWK121
PSY121	General Psychology^	3	IDS102 **or** Proficiency
SOC225	Cultural Diversity++	3	
BIO127	Human Biology (lab)	4	
*Technical Elective**		3	
		19	
Third Semester			
SWK130	Methods in Practice II++	3	SWK124
SWK126	Human Behavior and the Social Environment^	3	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
SWK125	Substance Abuse	3	
SWK225	Victimization and Crisis Intervention	3	
PSC121	Political Science^	3	
		18	
Fourth Semester			
BUS122	Basic Economics^	3	IDS102 **or** Proficiency
SWK231	HSS Social Service Practicum/Seminar	3	SWK224 **and** SWK130
GER121	Introduction to Gerontology	3	
SWK127	Group Processes++	3	
*Technical Elective**		3	
		15	
	TOTAL CREDITS	**68**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
***** *Technical Electives* –GER122, SOC121, SOC122, SOC124, SOC221, SOC222, PSY122, PSY123, PSY124, PSY125, PSY220, PSY221, SWK223, SWK 226, SWK230

Note: Students who successfully complete GER122 and SWK230 as their technical electives, or in addition to their technical electives, may apply for the gerontology option and/or certificate of competency.

Students are required to follow the program curriculum in effect when they begin taking technical courses, not when students are accepted to the College or program.

HEALTH AND HUMAN SERVICES DIVISION
ASSOCIATE OF APPLIED SCIENCE

1003

HUMAN AND SOCIAL SERVICES – GERONTOLOGY MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SWK121	Introduction to Social Welfare++	3		
SWK124	Methods in Practice I++	3	SWK121	
SWK130	Methods in Practice II++	3	SWK124	
SWK125	Substance Abuse	3		
SWK126	Human Behavior in the Social Environment++	3		
SWK127	Group Processes++	3		
GER121	Introduction to Gerontology	3		
SWK224	Poverty in the U.S. ++	3	SWK121	
SWK225	Victimization and Crisis Intervention	3		
SWK231	HSS Practicum /Seminar++	3	SWK224 **and** SWK130	
SWK230	Social Services for the Elderly++	3		
GER122	Psychosocial Aspects of Aging++	3		
	Total	**36**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
SOC123	Dynamics of the Family	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSC121	Political Science	3		
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity++	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121	Effective Speaking	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
BIO127	Human Biology (lab)	4		
	Total	**32**		
	TOTAL CREDIT HOURS	**68**		

^Based on SSC placement score
^^To promote student success, this course should be taken in the first semester.
++Minimum grade of "C" required.

Students are required to follow the program curriculum in effect when they begin taking technical courses, not when students are accepted to the College or program.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

HUMAN AND SOCIAL SERVICES – GERONTOLOGY MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
SWK121	Introduction to Social Welfare++	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
SOC123	Dynamics of the Family	3	
COM121	Effective Speaking	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		16	
Second Semester			
GER121	Introduction to Gerontology	3	
SWK224	Poverty in the U.S.++	3	SWK121
PSY121	General Psychology^	3	IDS102 **or** Proficiency
SOC225	Cultural Diversity++	3	
SWK124	Methods in Practice I++	3	SWK121
SWK225	Victimization and Crisis Intervention	3	
		18	
Third Semester			
SWK130	Methods in Practice II++	3	SWK124
SWK126	Human Behavior and the Social Environment++	3	
MTH124	Statistics^	3	(MTH093 or MTH094)++ **or** Proficiency
SWK125	Substance Abuse	3	
GER122	Psychosocial Aspects of Aging++	3	
PSC121	Political Science	3	
		18	
Fourth Semester			
BUS122	Basic Economics^	3	IDS102 **or** Proficiency
SWK231	HSS Social Service Practicum/Seminar++	3	SWK224 **and** SWK130
SWK230	Social Services for the Elderly++	3	
SWK127	Group Processes++	3	
BIO127	Human Biology (lab)	4	
		16	
	TOTAL CREDITS	**68**	

^Based on SSC placement score

^^To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

Students are required to follow the program curriculum in effect when they begin taking technical courses, not when students are accepted to the College or program.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

1004

HUMAN AND SOCIAL SERVICES – CHEMICAL DEPENDENCY MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SWK121	Introduction to Social Welfare++	3		
CDC121	Chemical Dependency: Assessment and Treatment Planning++	3	SWK125	
CDC122	Fundamentals of Chemical Dependency Practice I++	3	SWK125	
CDC222	Fundamentals of Chemical Dependency Practice II++	3	CDC122	
SWK125	Substance Abuse++	3		
SWK126	Human Behavior in the Social Environment++	3		
SWK127	Group Processes++	3		
CDC221	Chemical Dependency and the Family++	3	SWK125	
SWK224	Poverty in the U.S.++	3	SWK121 **or** SOC121	
SWK225	Victim and Crisis Intervention	3		
CDC231	Chemical Dependency Practicum and Seminar++	3	SWK224 **and** CDC222	
CDC223	Chemical Dependency and Prevention++	1	SWK125	
CDC224	Chemical Dependency and Ethics++	1	SWK125	
	Total	**35**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSC121	Political Science	3		
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity++	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121	Effective Speaking	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
BIO127	Human Biology (lab)	4		
	Total	**32**		
	TOTAL CREDIT HOURS	**67**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

Students are required to follow the program curriculum in effect when they begin taking technical courses, not when students are accepted to the College or program.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

HUMAN AND SOCIAL SERVICES – CHEMICAL DEPENDENCY MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
SWK121	Introduction to Social Welfare++	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
SOC121	Sociology^	3	IDS102 **or** Proficiency
COM121	Effective Speaking	3	
SWK125	Substance Abuse++	3	
		16	
Second Semester			
CDC121	Chemical Dependency: Assessment and Treatment Planning++	3	SWK125
SWK224	Poverty in the U.S.++	3	SOC121 **or** SWK121
PSY121	General Psychology^	3	IDS102 **or** Proficiency
SOC225	Cultural Diversity++	3	
CDC122	Fundamentals of Chemical Dependency Practice I++	3	SWK125
SWK225	Victim and Crisis Intervention	3	
		18	
Third Semester			
CDC222	Fundamentals of Chemical Dependency Practice II++	3	CDC122
SWK126	Human Behavior and the Social Environment++	3	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
CDC221	Chemical Dependency and Family+++	3	SWK125
CDC223	Chemical Dependency and Prevention++	1	SWK125
CDC224	Chemical Dependency and Ethics++	1	SWK125
PSC121	Political Science	3	
		17	
Fourth Semester			
BUS122	Basic Economics^	3	IDS102 **or** Proficiency
CDC231	Chemical Dependency Practicum and Seminar++	3	SWK224 **and** CDC222
SWK127	Group Processes++	3	
BIO127	Human Biology (lab)	4	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		16	
	TOTAL CREDITS	**67**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

Students are required to follow the program curriculum in effect when they begin taking technical courses, not when students are accepted to the College or program.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF TECHNICAL STUDIES

3450

MASSAGE THERAPY – FALL START

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAS121	Massage Therapy I	6		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
MAS123	Massage Therapy Anatomy & Physiology I♦	1		
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122	
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226	
MAS224	Massage Therapy III	2	MAS122	
MAS225	Massage Therapy IV	2	MAS224	
MAS226	Massage Therapy V	3	MAS124 **and** MAS225 **and** Co-MAS223	
MAS227	Massage Therapy Procedures	2	MAS121	
MAS228	Professional Practice and Evaluation	1	MAS122	
MAS229	Clinic Operations	2	MAS225	
BIO124	Human Diseases♦	3	BIO122 **or** BIO123	
SSC101	Student Success Seminar^^♦	1	*Take first semester*	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO125	Medical Terminology	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
GER121	Introduction to Gerontology♦	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH105 **or** MTH124	Math for Allied Health^Ω **or** Statistics^	3	(MTH091 and MTH092)+ **or** Proficiency (MTH093 and MTH094)++ **or** Proficiency	
PHL122	Ethics	3		
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency	
	Total	**32**		
	TOTAL CREDIT HOURS	**62**		

^Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

♦ Indicates Web 3 course.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MASSAGE THERAPY – FALL START

Effective Summer 2014

Fall Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^♦	1	*Take first semester*
MAS121	Massage Therapy I	6	
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency
COM121	Effective Speaking	3	
ENG 124	College Composition^	3	ENG011 **or** Proficiency
MAS123	Massage Therapy Anatomy & Physiology I♦	1	
		18	
Spring Semester			
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency
MAS224	Massage Therapy III	2	MAS122
		13	
Summer Semester			
BIO124	Human Diseases♦	3	BIO122 **or** BIO123
BIO125	Medical Terminology	3	
MAS225	Massage Therapy IV	2	MAS224
MAS228	Professional Practice and Evaluation	1	MAS122
		9	
Fall Semester			
MTH105	Math for Allied Health^Ω		(MTH091 and MTH092)+ **or** Proficiency
or MTH124	**or** Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226
MAS226	Massage Therapy V	3	MAS124 **and** MAS225
MAS227	Massage Therapy Procedures	2	MAS121
MAS229	Clinic Operations	2	MAS225
		13	
Spring Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
GER121	Introduction to Gerontology♦	3	
PHL122	Ethics	3	
		9	
	TOTAL CREDITS	**62**	

^Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

♦ **Indicates Web 3 course.**

+Minimum grade of "B" required.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

HEALTH AND HUMAN SERVICES DIVISION

ONE-YEAR CERTIFICATE

3451

MASSAGE THERAPY (One-Year Certificate) – FALL START

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^♦	1	*Take first semester*	
MAS121	Massage Therapy I	6		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
MAS123	Massage Therapy Anatomy & Physiology I♦	1		
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122	
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co- MAS226	
MAS224	Massage Therapy III	2	MAS122	
MAS225	Massage Therapy IV	2	MAS224	
MAS226	Massage Therapy V	3	MAS225 **and** MAS124 **and** Co-MAS223	
MAS227	Massage Therapy Procedures	2	MAS121	
MAS228	Professional Practice and Evaluation	1	MAS122	
MAS229	Clinic Operations	2	MAS225	
	Total	**27**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases♦	3	BIO122 **or** BIO123	
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency	
	Total	**14**		
	TOTAL CREDIT HOURS	**41**		

^Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

♦ Indicates Web 3 course.

+Minimum grade of "B" required.

⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in one year.

MASSAGE THERAPY (One-Year Certificate) – FALL START

Effective Summer 2014

Fall Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^♦	1	*Take first semester*
MAS121	Massage Therapy I	6	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101+ **or** Proficiency
MAS123	Massage Therapy Anatomy & Physiology I♦	1	
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency
		15	
Spring Semester			
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
BIO122	Anatomy and Physiology II (lab)	4	(BIO121 or BIO123) **and** Co-MAS124
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122
MAS224	Massage Therapy III	2	MAS122
		10	
Summer Semester			
BIO124	Human Diseases♦	3	BIO122 **or** BIO123
MAS225	Massage Therapy IV	2	MAS224
MAS228	Professional Practice & Evaluation	1	MAS122
		6	
Fall Semester			
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226
MAS226	Massage Therapy V	3	MAS225 **and** MAS124 **and** Co-MAS223
MAS227	Massage Therapy Procedures	2	MAS121
MAS229	Clinic Operations	2	MAS225
		10	
	TOTAL CREDITS	**41**	

^Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

♦ **Indicates Web 3 course.**

+Minimum grade of "B" required.

⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF TECHNICAL STUDIES

3450

MASSAGE THERAPY – SPRING START

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAS121	Massage Therapy I	6		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
MAS123	Massage Therapy Anatomy & Physiology I♦	1		
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122	
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226	
MAS224	Massage Therapy III	2	MAS122	
MAS225	Massage Therapy IV	2	MAS224	
MAS226	Massage Therapy V	3	MAS124 **and** MAS225 **and** Co-MAS223	
MAS227	Massage Therapy Procedures	2	MAS121	
MAS228	Professional Practice and Evaluation	1	MAS122	
MAS229	Clinic Operations	2	MAS225	
BIO124	Human Diseases♦	3	BIO122 **or** BIO123	
SSC101	Student Success Seminar^^♦	1	*Take first semester*	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO125	Medical Terminology	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
GER121	Introduction to Gerontology♦	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH105 **or** MTH124	Math for Allied Health^Ω **or** Statistics^	3	(MTH091 and MTH092)+ **or** Proficiency (MTH093 and MTH094)++ **or** Proficiency	
PHL122	Ethics	3		
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency	
	Total	**32**		
	TOTAL CREDIT HOURS	**62**		

^Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

♦ Indicates Web 3 course.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MASSAGE THERAPY – SPRING START

Effective Summer 2014

Spring Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^♦	1	*Take first semester*
MAS121	Massage Therapy I	6	
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency
COM121	Effective Speaking	3	
MAS123	Massage Therapy Anatomy & Physiology I♦	1	
		15	
Summer Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
ENG124	College Composition^	3	ENG011 **or** Proficiency
BIO125	Medical Terminology	3	
		11	
Fall Semester			
BIO122	Anatomy & Physiology II	4	BIO121 **or** BIO123
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency
MAS224	Massage Therapy III	2	MAS122
MAS225	Massage Therapy IV	2	MAS224
MAS227	Massage Therapy Procedures	2	MAS121
MAS228	Professional Practice & Evaluation	1	MAS122
		16	
Spring Semester			
BIO124	Human Diseases♦	3	BIO122 **or** BIO123
MAS223	Massage Therapy Review	3	BIO122 **and** Co-MAS226
MAS226	Massage Therapy V	3	MAS225 **and** MAS124
MAS229	Clinic Operations	2	MAS225
		11	
Summer Semester			
MTH105	Math for Allied Health^Ω	3	(MTH091 and MTH092)+ **or** Proficiency
or	**or**		
MTH124	Statistics	3	(MTH093 and MTH094)++ **or** Proficiency
GER121	Introduction to Gerontology♦	3	
PHL122	Ethics	3	
		9	
	TOTAL CREDITS	**62**	

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
♦ **Indicates Web 3 course.**
+Minimum grade of "B" required.
++Minimum grade of "C" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

Revised 02/2014

HEALTH AND HUMAN SERVICES DIVISION
ONE-YEAR CERTIFICATE

3451

MASSAGE THERAPY (One-Year Certificate) – SPRING START

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^♦	1	*Take first semester*	
MAS121	Massage Therapy I	6		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
MAS123	Massage Therapy Anatomy & Physiology I♦	1		
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122	
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co- MAS226	
MAS224	Massage Therapy III	2	MAS122	
MAS225	Massage Therapy IV	2	MAS224	
MAS226	Massage Therapy V	3	MAS225 **and** MAS124 **and** Co-MAS223	
MAS227	Massage Therapy Procedures	2	MAS121	
MAS228	Professional Practice and Evaluation	1	MAS122	
MAS229	Clinic Operations	2	MAS225	
	Total	**27**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases♦	3	BIO122 **or** BIO123	
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency	
	Total	**14**		
	TOTAL CREDIT HOURS	**41**		

^Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
♦ **Indicates Web 3 course.**
+Minimum grade of "B" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in one year.

MASSAGE THERAPY (One-Year Certificate) – SPRING START

Effective Summer 2014

Spring Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^♦	1	*Take first semester*
MAS121	Massage Therapy I	6	
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency
MAS123	Massage Therapy Anatomy & Physiology I♦	1	
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency
		15	
Summer Semester			
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
		2	
Fall Semester			
BIO122	Anatomy and Physiology II (lab)	4	(BIO121 or BIO123) **and** Co-MAS124
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122
MAS224	Massage Therapy III	2	MAS122
MAS225	Massage Therapy IV	2	MAS224
MAS228	Professional Practice and Evaluation	1	MAS122
		11	
Spring Semester			
BIO124	Human Diseases♦	3	BIO122 **or** BIO123
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226
MAS226	Massage Therapy V	3	MAS225 **and** MAS124 **and** Co-MAS223
MAS227	Massage Therapy Procedures	2	MAS121
MAS229	Clinic Operations	2	MAS225
		13	
	TOTAL CREDITS	**41**	

^Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
♦ **Indicates Web 3 course.**
+Minimum grade of "B" required.
⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

HEALTH AND HUMAN SERVICES DIVISION
ASSOCIATE OF APPLIED SCIENCE

3453

MASSAGE THERAPY – FALL START

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAS121	Massage Therapy I	6		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
MAS123	Massage Therapy Anatomy & Physiology I♦	1		
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122	
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226	
MAS224	Massage Therapy III	2	MAS122	
MAS225	Massage Therapy IV	2	MAS 224	
MAS226	Massage Therapy V	3	MAS124 **and** MAS225	
MAS227	Massage Therapy Procedures	2	MAS121	
MAS228	Professional Practice and Evaluation	1	MAS122	
MAS229	Clinic Operations	2	MAS225	
MAS231	Sports Massage	2	MAS121	
BIO124	Human Diseases♦	3	BIO122 **or** BIO123	
	TOTAL	**31**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^♦	1	*Take first semester*	
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency	
BIO122	Anatomy and Physiology II	4	BIO121 **or** BIO123	
BIO125	Medical Terminology	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH105 **or** MTH124	Math for Allied Health^Ω **or** Statistics^	3	(MTH091 and MTH092)+ **or** Proficiency (MTH093 and MTH094)++ **or** Proficiency	
NTR121	Basic Medical Nutrition	3	IDS102 **or** Proficiency	
PHL122	Ethics	3		
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency	
PTA226	Functional Anatomy	4	BIO122 **or** BIO123	
	TOTAL	**31**		
	TOTAL CREDIT HOURS	**62**		

^Based on SSC placement scores

♦ **Indicates Web 3 course.**

+Minimum grade of "B" required.

++Minimum grade of "C" required.

⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Ω MTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MASSAGE THERAPY – FALL START

Effective Summer 2014

Fall Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^♦	1	*Take first semester*
MAS121	Massage Therapy I	6	
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency
BIO125	Medical Terminology	3	
MAS123	Massage Therapy Anatomy & Physiology I♦	1	
		15	
Spring Semester			
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO 122
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency
MAS224	Massage Therapy III	2	MAS122
		13	
Summer			
BIO124	Human Diseases♦	3	BIO122 **or** BIO123
ENG 124	College Composition^	3	ENG011 **or** Proficiency
MAS225	Massage Therapy IV	2	MAS224
MAS228	Professional Practice and Evaluation	1	MAS122
		9	
Fall Semester			
MTH105	Math for Allied Health^Ω		(MTH091 and MTH092)+ **or** Proficiency
or MTH124	**or** Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
MAS223	Massage Therapy Review	3	(BIO 122 or BIO123) **and** Co-MAS226
MAS226	Massage Therapy V	3	MAS124 **and** MAS 225
MAS227	Massage Therapy Procedures	2	MAS121
MAS229	Clinic Operations	2	MAS225
		13	
Spring			
MAS231	Sports Massage	2	MAS121
NTR121	Basic Medical Nutrition^	3	IDS102 **or** Proficiency
PTA226	Functional Anatomy	4	BIO122 **or** BIO123
PHL122	Ethics	3	
		12	
	TOTAL CREDITS	**62**	

^Based on SSC placement scores
♦ **Indicates Web 3 course.**
+Minimum grade of "B" required.
++Minimum grade of "C" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
Ω MTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

Revised 02/2014

HEALTH AND HUMAN SERVICES DIVISION
ASSOCIATE OF APPLIED SCIENCE

3453

MASSAGE THERAPY – SPRING START

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAS121	Massage Therapy I	6		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
MAS123	Massage Therapy Anatomy & Physiology I♦	1		
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122	
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226	
MAS224	Massage Therapy III	2	MAS122	
MAS225	Massage Therapy IV	2	MAS 224	
MAS226	Massage Therapy V	3	MAS124 **and** MAS225	
MAS227	Massage Therapy Procedures	2	MAS121	
MAS228	Professional Practice and Evaluation	1	MAS122	
MAS229	Clinic Operations	2	MAS225	
MAS231	Sports Massage	2	MAS121	
BIO124	Human Diseases♦	3	BIO122 **or** BIO123	
	TOTAL	**31**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^♦	1	*Take first semester*	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101+ or Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO125	Medical Terminology	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH105 **or** MTH124	Math for Allied Health^Ω **or** Statistics^	3	(MTH091 and MTH092)+ **or** Proficiency (MTH093 and MTH094)++ **or** Proficiency	
NTR121	Basic Medical Nutrition^	3	IDS102 **or** Proficiency	
PHL122	Ethics	3		
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency	
PTA226	Functional Anatomy	4	BIO122 **or** BIO123	
	TOTAL	**31**		
	TOTAL CREDIT HOURS	**62**		

^Based on SSC placement scores

♦ **Indicates Web 3 course.**

+Minimum grade of "B" required.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Ω MTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MASSAGE THERAPY – SPRING START

Effective Summer 2014

Spring Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^♦	1	*Take first semester*
MAS121	Massage Therapy I	6	
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency
BIO125	Medical Terminology	3	
MAS123	Massage Therapy Anatomy & Physiology I♦	1	
		15	
Summer			
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency
		9	
Fall Semester			
BIO124	Human Diseases♦	3	BIO122 **or** BIO123
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO 122
MAS224	Massage Therapy III	2	MAS122
MAS225	Massage Therapy IV	2	MAS224
MAS227	Massage Therapy Procedures	2	MAS121
MAS228	Professional Practice and Evaluation	1	MAS122
		12	
Spring Semester			
MAS223	Massage Therapy Review	3	(BIO 122 **or** BIO123) **and** Co-MAS226
MAS226	Massage Therapy V	3	MAS124 **and** MAS 225
MAS229	Clinic Operations	2	MAS225
MAS231	Sports Massage	2	MAS121
PTA226	Functional Anatomy	4	BIO122 **or** BIO123
		14	
Summer			
MTH105	Math for Allied Health^Ω		(MTH091 and MTH092)+ **or** Proficiency
or MTH124	**or** Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
ENG 124	College Composition^	3	ENG011 **or** Proficiency
NTR121	Basic Medical Nutrition^	3	IDS102 **or** Proficiency
PHL122	Ethics	3	
		12	
	TOTAL CREDITS	**62**	

^Based on SSC placement scores
♦ **Indicates Web 3 course.**
+Minimum grade of "B" required.
++Minimum grade of "C" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
Ω MTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to the Massage program.

Revised 02/2014

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF TECHNICAL STUDIES

3450

MASSAGE THERAPY & MIDPOINT CAMPUS CENTER – FALL START

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^*♦	1	*Take first semester*	
MAS121	Massage Therapy I	6		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
MAS123	Massage Therapy Anatomy & Physiology I♦	1		
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIOG 122	
MAS223	Massage Therapy Review	3	BIOG 122 **and** Co-MAS 226	
MAS224	Massage Therapy III	2	MAS122	
MAS225	Massage Therapy IV	2	MAS 224	
MAS226	Massage Therapy V	3	MAS124 **and** MAS 225	
MAS227	Massage Therapy Procedures	2	MAS 121	
MAS228	Professional Practice and Evaluation	1	MAS 122	
MAS229	Clinic Operations	2	MAS 225	
BIO124	Human Diseases♦	3	BIOG122 **and** (BIO122 or BIO123)	
	TOTAL	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ALHN110 (BIO125)	Medical Terminology	3		
BIOG121 (BIO121)	Anatomy and Physiology I (lab)⅄	4	HS BIO within last 5 years or BIOG115 (BIO101 **or** Proficiency)	
BIOG122 (BIO122)	Anatomy and Physiology II (lab)	4	BIOG121 (BIO121)	
CISS121 (ITD122)	Microcomputer Applications^	3	ITD100 **or** Proficiency	
CMMC151	Oral Communication	3		
ENGL161 (ENG124)	College Composition^	4	ENG011 **or** Proficiency	
MTHM168 (MTH124)	Statistics^	3	MTHM 023 ((MTH093 and MTH094)++ or Proficiency)	
PHLY165(PHL122)	BIO ETHICS (Ethics)	3		
GER121	Introduction to Gerontology♦	3		
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency	
	TOTAL	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

♦ Indicates WEB 3 online courses.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

***SDEV101 can be substituted for SSC101.**

Grey denotes courses offered by Lorain County Community College.
<u>All program courses</u> will be held at Midpoint Campus Center, unless offered on line.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MASSAGE THERAPY & MIDPOINT CAMPUS CENTER – FALL START

Effective Summer 2014

Fall Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^*♦	1	*Take first semester*
MAS121	Massage Therapy I	6	
BIOG121	Anatomy and Physiology I (lab)⅄	4	BIOG115 (BIO101 **or** Proficiency)
ENGL161	College Composition^	4	ENG011 **or** Proficiency
MAS123	Massage Therapy Anatomy & Physiology I♦	1	
		16	
Spring Semester			
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
BIOG122	Anatomy and Physiology II (lab)	4	BIOG121 (BIO121 **or** BIO123)
MAS124	Massage Therapy Anatomy & Physiology II♦	2	BIOG 122 (MAS123)
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency
MAS224	Massage Therapy III	2	MAS122
		13	
Summer			
BIO124	Human Diseases♦	3	BIOG122 (BIO122 **or** BIO123)
ALHN110	Medical Terminology	3	
MAS225	Massage Therapy IV	2	MAS224
MAS228	Professional Practice and Evaluation	1	MAS122
		9	
Fall Semester			
MTHM168	Statistics^	3	MTHM 023 ((MTH03 and MTH094)++ **or** Proficiency)
MAS223	Massage Therapy Review	3	BIOG 122 **and** Co-MAS226
MAS226	Massage Therapy V	3	MAS124 **and** MAS 225
MAS227	Massage Therapy Procedures	2	MAS121
MAS229	Clinic Operations	2	MAS225
		14	
Spring Semester			
CISS121	Microcomputer Applications^	3	ITD100 **or** Proficiency
PHLY165	Bioethics	3	
CMMC151	Oral Communication	3	
GER121	Introduction to Gerontology♦	3	
		12	
	TOTAL CREDITS	**63**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

♦ **Indicates WEB 3 online courses.**

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

***SDEV101 can be substituted for SSC101.**

Grey denotes courses offered by Lorain County Community College.
All program courses will be held at Midpoint Campus Center, unless offered on line.

HEALTH AND HUMAN SERVICES DIVISION
ONE-YEAR CERTIFICATE

3451

MASSAGE THERAPY @ MIDPOINT CAMPUS CENTER

(One-Year Certificate) – FALL START

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAS121	Massage Therapy I	6		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
MAS123	Massage Therapy Anatomy and Physiology I♦	1		
MAS124	Massage Therapy Anatomy and Physiology II♦	2	MAS123 **and** Co-BIOG122	
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226	
MAS224	Massage Therapy III	2	MAS122	
MAS225	Massage Therapy IV	2	MAS224	
MAS226	Massage Therapy V	3	MAS124 **and** MAS225 **and** Co-MAS223	
MAS227	Massage Therapy Procedures	2	MAS121	
MAS228	Professional Practice and Evaluation	1	MAS122	
MAS229	Clinic Operations	2	MAS225	
	Total	**26**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SDEV101	College 101^^*	1	*Take first semester*	
BIOG121 (BIO121)	Anatomy and Physiology I (lab)^⅄	4	BIO101+ **or** Proficiency	
BIOG122 (BIO122)	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases♦	3	BIO122 **or** BIO123	
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency	
	Total	**15**		
	TOTAL CREDIT HOURS	**41**		

^Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
*SSC101 can be substituted for SDEV101.
♦ **Indicates Web 3 course.**
+Minimum grade of "B" required.
⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Application criteria requires a "B" or better in BIO101, BIOG115, or HS BIO to apply to this Massage program.

Grey denotes courses offered by Lorain County Community College.
All program courses will be held at Midpoint Campus Center unless offered online.

3451

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MASSAGE THERAPY @ MIDPOINT CAMPUS CENTER

(One-Year Certificate) – FALL START

Effective Summer 2014

Fall Semester		Credit Hours	Pre- and Co-requisites
SDEV101	College 101^^*	1	*Take first semester*
MAS121	Massage Therapy I	6	
BIOG121 (BIO121)	Anatomy and Physiology (lab)^⅄	4	BIO101+ **or** Proficiency
MAS123	Massage Therapy Anatomy & Physiology I♦	1	
PSY222	Psychological Aspects of Therapy^♦	3	IDS102 **or** Proficiency
		15	
Spring Semester			
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
BIOG122 (BIO122)	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123
MAS124	Massage Therapy Anatomy & Physiology II♦	2	MAS123 **and** Co-BIO122
MAS224	Massage Therapy III	2	MAS122
		10	
Summer Semester			
MAS225	Massage Therapy IV	2	MAS 224
MAS228	Professional Practice and Evaluation	1	MAS 122
BIO124	Human Diseases♦	3	BIO122 **or** BIO123
		6	
Fall Semester			
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226
MAS226	Massage Therapy V	3	MAS124 **and** MAS225 **and** Co-MAS223
MAS227	Massage Therapy Procedures	2	MAS121
MAS229	Clinic Operations	2	MAS225
		10	
	TOTAL CREDITS	**41**	

^Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
*SSC101 can be substituted for SDEV101.
♦ **Indicates Web 3 course.**
+Minimum grade of "B" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Application criteria requires a "B" or better in BIO101, BIOG115, or HS BIO to apply to this Massage program.

Grey denotes courses offered by Lorain County Community College.
All program courses will be held at Midpoint Campus Center unless offered online.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

3100

MEDICAL ASSISTING – Day Track

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAT121	Medical Assisting I	5		
MAT122	Medical Assisting II	5	MAT121	
MAT123	Medical Assisting III	2	MAT122	
MAT124	Medical Law & Ethics	3	MAT121	
MAT221	Medical Laboratory Procedures for Medical Assisting	3	MAT122	
MAT222	Insurance for Medical Assisting	3	MAT122	
MAT223	Medical Office Procedures	4	MAT122	
MAT224	Pharmacology/Administration of Medications	4	MAT122	
MAT225	Emergency Medical Procedures	2	MAT122	
MAT226	Medical Office Management	3	MAT122	
MAT227	Medical Assisting Practicum	2	Co-MAT123	
MAT233	Medical Assisting Seminar	1	Co-MAT123	
	Total	**37**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 **or** Proficiency	
BIO125	Medical Terminology	3		
COM122	Interpersonal Communications	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
GER121	Introduction to Gerontology	3		
MTH105	Math for Allied Health^ Ω	3	(MTH091 and MTH092) **or** Proficiency+	
NTR121	Basic Medical Nutrition^	3	IDS102 **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY123	Human Growth and Development	3	PSY121	
	Elective [1]	**3-4**		
	Total	**34-35**		
	TOTAL CREDIT HOURS	**71-72**		

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] **Choose from MAT230 or MAT 234 and MAT 235 as a technical elective or SOC121, GER 122, SOC 225 as a non-technical elective. MAT234 requires MAT235 in order to apply for the certification exam.**

Application criteria requires a "B" or better in HS BIO or BIO101, and (MTH091 and MTH092) or Proficiency to apply to the MAT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MEDICAL ASSISTING – Day Track

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 **or** Proficiency
MAT121	Medical Assisting I	5	
BIO125	Medical Terminology	3	
GER121	Introduction to Gerontology	3	
		15	
Second Semester			
MTH105	Math for Allied Health^Ω	3	(MTH091 and MTH092) **or** Proficiency+
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
NTR121	Basic Medical Nutrition^	3	IDS102 **or** Proficiency
MAT122	Medical Assisting II	5	MAT121
MAT124	Medical Law & Ethics	3	MAT121
		17	
Third Semester (Summer)			
COM122	Interpersonal Communication	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
		9	
Fourth Semester			
MAT221	Medical Lab Procedures for Medical Assisting	3	MAT122
MAT222	Insurance for Medical Assisting	3	MAT122
MAT223	Medical Office Procedures	4	MAT122
MAT224	Pharmacology/Administration of Medications	4	MAT122
PSY123	Human Growth and Development	3	PSY121
		17	
Fifth Semester			
MAT123	Medical Assisting III	2	MAT122
MAT225	Emergency Medical Procedure	2	MAT122
MAT226	Medical Office Management	3	MAT122
MAT227	Medical Assisting Practicum	2	Co-MAT123
MAT233	Medical Assisting Seminar	1	Co-MAT123
Elective [1]		3-4	
		13-14	
	TOTAL CREDITS	**71-72**	

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] **Choose from MAT230 or MAT 234 and MAT 235 as a technical elective or SOC121, GER 122, SOC 225 as a non-technical elective. MAT234 requires MAT235 in order to apply for the certification exam.**

Application criteria requires a "B" or better in HS BIO or BIO101, and (MTH091 and MTH092) or Proficiency to apply to the MAT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

3100

MEDICAL ASSISTING – Night Track

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAT121	Medical Assisting I	5		
MAT122	Medical Assisting II	5	MAT121	
MAT123	Medical Assisting III	2	MAT122	
MAT124	Medical Law & Ethics	3	MAT121	
MAT221	Medical Laboratory Procedures for Medical Assisting	3	MAT122	
MAT222	Insurance for Medical Assisting	3	MAT122	
MAT223	Medical Office Procedures	4	MAT122	
MAT224	Pharmacology/Administration of Medications	4	MAT122	
MAT225	Emergency Medical Procedures	2	MAT122	
MAT226	Medical Office Management	3	MAT122	
MAT227	Medical Assisting Practicum	2	Co-MAT123	
MAT233	Medical Assisting Seminar	1	Co-MAT123	
	Total	**37**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 **or** Proficiency	
BIO125	Medical Terminology	3		
COM122	Interpersonal Communications	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
GER121	Introduction to Gerontology	3		
MTH105	Math for Allied Health^ Ω	3	(MTH091 and MTH092) **or** Proficiency+	
NTR121	Basic Medical Nutrition^	3	IDS102 **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY123	Human Growth and Development	3	PSY121	
	Elective [1]	**3-4**		
	Total	**34-35**		
	TOTAL CREDIT HOURS	**71-72**		

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] **Choose from MAT230 or MAT 234 and MAT 235 as a technical elective or SOC121, GER 122, SOC 225 as a non-technical elective. MAT234 requires MAT235 in order to apply for the certification exam.**

Application criteria requires a "B" or better in HS BIO or BIO101, and (MTH091 and MTH092) or Proficiency to apply to the MAT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MEDICAL ASSISTING – Night Track

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 **or** Proficiency
MAT121	Medical Assisting I	5	
BIO125	Medical Terminology	3	
GER121	Introduction to Gerontology	3	
		15	
Second Semester			
MTH105	Math for Allied Health^Ω	3	(MTH091 and MTH092) **or** Proficiency+
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
NTR121	Basic Medical Nutrition^	3	IDS102 **or** Proficiency
MAT122	Medical Assisting II	5	MAT121
MAT124	Medical Law & Ethics	3	MAT121
		17	
Third Semester (Summer)			
COM122	Interpersonal Communication	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
		9	
Fourth Semester			
MAT221	Medical Lab Procedures for Medical Assisting	3	MAT122
MAT222	Insurance for Medical Assisting	3	MAT122
MAT223	Medical Office Procedures	4	MAT122
MAT224	Pharmacology/Administration of Medications	4	MAT122
PSY123	Human Growth and Development	3	PSY121
		17	
Fifth Semester			
MAT123	Medical Assisting III	2	MAT122
MAT225	Emergency Medical Procedure	2	MAT122
MAT226	Medical Office Management	3	MAT122
MAT227	Medical Assisting Practicum	2	Co-MAT123
MAT233	Medical Assisting Seminar	1	Co-MAT123
Elective [1]		3-4	
		13-14	
	TOTAL CREDITS	**71-72**	

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

[1] **Choose from MAT230 or MAT 234 and MAT 235 as a technical elective or SOC121, GER 122, SOC 225 as a non-technical elective. MAT234 requires MAT235 in order to apply for the certification exam.**

Application criteria requires a "B" or better in HS BIO or BIO101, and (MTH091 and MTH092) or Proficiency to apply to the MAT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

3300

MEDICAL LABORATORY TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MLT121	Fundamentals of Lab Techniques	3		
MLT122	Urinalysis and Body Fluids	3	MLT124	
MLT123	Hematology I	3		
MLT124	Hematology II	4	MLT123	
MLT125	Immunohematology	5	MLT126	
MLT126	Clinical Immunology/Serology	3		
MLT222	Clinical Chemistry	5	(BIO122 or BIO123) **and** MLT121 **and** MLT122 **and** CHM122	
MLT223	Clinical Microbiology	7	BIO221 **and** MLT126	
MLT225	MLT Applications	3	MLT223 **and** MLT125 **and** MLT222	
MLT226	Directed Practice	6	MLT225 **and** Co-MLT227	
MLT227	Seminar	1	MLT225 **and** Co-MLT226	
	Total	**43**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO123	Principles of Human Structure & Function (lab)#	5	BIO101+ **or** BIO127	
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM121	Gen., Org., & Bio., Chemistry I (lab)^⍋	4	CHM101 **or** Proficiency+	
CHM122	Gen., Org., & Bio., Chemistry II (lab)	4	CHM121	
MTH124	Statistics^	3	(MTH093 and MTH094) **or** Proficiency+	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
	Elective [1]	2		
	Social Science Elective [2]	3		
	Total	**28**		
	TOTAL CREDIT HOURS	**71**		

^Based on SSC placement scores

+Minimum grade of "B" required.

#BIO121 and BIO122 may be substituted for BIO123.

⍋Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Elective per MLT advisor.

[2] PSY121 or SOC121 or other substitution with permission

Application criteria requires a "B" or better in BIO101 or HS BIO, CHM101 or HS CHM, and (MTH093 and MTH094) or Proficiency to apply to the MLT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising:
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence:
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MEDICAL LABORATORY TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101+ or BIO127
CHM121	Gen., Org., Bio., Chemistry I (lab)^⅄	4	CHM101 **or** Proficiency+
MLT121	Fundamentals of Laboratory Techniques	3	
MLT126	Clinical Immunology/Serology	3	
MLT123	Hematology I	3	
		18	
Second Semester			
CHM122	Gen., Org., & Bio., Chemistry II (lab)	4	CHM121
MTH124	Statistics^	3	(MTH093 and MTH094) **or** Proficiency+
ENG124	College Composition^	3	ENG011 **or** Proficiency
MLT124	Hematology II	4	MLT123
MLT125	Immunohematology	5	MLT126
		19	
Summer			
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123, **or** BIO141
MLT122	Urinalysis and Body Fluids	3	MLT124
Elective [1]		2	
		9	
Fourth Semester			
Social Science Elective [2]		3	
MLT222	Clinical Chemistry	5	BIO123 **and** BIO122 **and** CHM122, MLT121 **and** MLT122
MLT223	Clinical Microbiology	7	BIO221 **and** MLT126
		15	
Fifth Semester			
MLT225	MLT Applications	3	MLT125 **and** MLT222 **and** MLT223
MLT226	Directed Practice	6	MLT225 **and** Co-MLT227
MLT227	Seminar	1	MLT225 **and** Co-MLT226
		10	
	TOTAL CREDITS	**71**	

^Based on SSC placement scores
+Minimum grade of "B" required.
#BIO121 and BIO122 may be substituted for BIO123.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
[1] Elective per MLT advisor.
[2] PSY121 or SOC121 or other substitution with permission

Application criteria requires a "B" or better in BIO101 or HS BIO, CHM101 or HS CHM, and (MTH093 and MTH094) or Proficiency to apply to the MLT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION
ASSOCIATE OF TECHNICAL STUDIES

3500

MEDICAL INSTRUMENT STERILIZATION TECHNICIAN

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MIS124	Medical Instrument Sterilization I	4	Co-BIO101 **and** Co-BIO125	
MIS125	Medical Instrument Sterilization I/Directed Practice	2	Co-MIS124	
MIS126	Medical Instrument Sterilization II	4	MIS124	
MIS127	Medical Instrument Sterilization II/Directed Practice	3	MIS124 **and** MIS125 **and** Co-MIS126	
MIS123	Intro to Surgical Terminology/Microbiology	3	MIS124	
MIS222	Medical Instrument Sterilization III	2	MIS123 **and** MIS126	
MIS223	Medical Instrument Sterilization III/Directed Practice	1	MIS127 **and** Co-MIS222	
	Total	**19**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101 **or** BIO127	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH105	Math for Allied Health^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PHL122	Ethics	3		
	Social Science Elective^*	3	IDS102 **or** Proficiency	
	Total	**43**		
	TOTAL CREDIT HOURS	**62**		

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
#BIO121 and BIO122 can be substituted for BIO123.
*May select from Sociology offerings only
Ω MTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria require ENG011 or required placement score and IDS102 or required placement score.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Medical Instrument Sterilization courses must be taken in the order listed below.

MEDICAL INSTRUMENT STERILIZATION TECHNICIAN

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
MIS124	Medical Instrument Sterilization I	4	Co-BIO125 **and** Co-BIO101
MIS125	Medical Instrument Sterilization I/Directed Practice	2	Co-MIS124
BIO125	Medical Terminology	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
		16	
Second Semester			
MIS126	Medical Instrument Sterilization II	4	MIS124
MIS127	Medical Instrument Sterilization II/Directed Practice	3	MIS124 **and** MIS125 **and** Co-MIS126
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101 **or** BIO121 **or** BIO127
MIS123	Introduction to Surgical Terminology/Microbiology	3	MIS124
		15	
Summer			
MIS222	Medical Instrument Sterilization III	2	MIS123 **and** MIS126
MIS223	Medical Instrument Sterilization III/Directed Practice	1	MIS127 **and** Co-MIS222
Social Science Elective^*		3	IDS102 **or** Proficiency
		6	
Third Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
COM122	Interpersonal Communication	3	
BIO124	Human Diseases	3	BIO122 **or** BIO123
		12	
Fourth Semester			
PHL122	Ethics	3	
COM121	Effective Speaking	3	
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141
MTH105	Math for Allied Health^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency
		13	
	TOTAL CREDITS	**62**	

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
+Minimum grade of "B" required.
#BIO121 and BIO122 can be substituted for BIO123.
*May select from Sociology offerings only
Ω MTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria require ENG011 or required placement score and IDS102 or required placement score.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

ONE-YEAR CERTIFICATE

3501

MEDICAL INSTRUMENT STERILIZATION TECHNICIAN

(One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MIS124	Medical Instrument Sterilization I	4	Co-BIO125 **and** Co-BIO101	
MIS125	Medical Instrument Sterilization I/Directed Practice	2	Co-MIS124	
MIS126	Medical Instrument Sterilization II	4	MIS124	
MIS127	Medical Instrument Sterilization II/Directed Practice	3	MIS124 **and** MIS125 **and** Co-MIS126	
MIS123	Intro to Surgical Terminology/Microbiology	3	MIS124	
MIS222	Medical Instrument Sterilization III	2	MIS123 **and** MIS126	
MIS223	Medical Instrument Sterilization III/ Directed Practice	1	MIS127 **and** Co-MIS222	
	Total	**19**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO125	Medical Terminology	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
PHL122	Ethics	3		
	Total	**13**		
	TOTAL CREDIT HOURS	**32**		

^Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.

Application criteria require ENG011 or required placement score and IDS102 or required placement score. Students are required to follow the program curriculum in effect when they begin taking technical courses, not when students are accepted to the College or program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Medical Instrument Sterilization courses must be taken in the order listed below.

MEDICAL INSTRUMENT STERILIZATION TECHNICIAN

(One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
MIS124	Medical Instrument Sterilization I	4	Co-BIO125 **and** Co- BIO101
MIS125	Medical Instrument Sterilization I/Directed Practice	2	Co-MIS124
BIO125	Medical Terminology	3	
		13	
Second Semester			
MIS126	Medical Instrument Sterilization II	4	MIS124
MIS127	Medical Instrument Sterilization II/Directed Practice	3	MIS124 **and** MIS125 **and** Co-MIS126
MIS123	Introduction to Surgical Terminology/Microbiology	3	MIS124
PHL122	Ethics	3	
		13	
Summer			
MIS222	Medical Instrument Sterilization III	2	MIS123 **and** MIS126
MIS223	Medical Instrument Sterilization III/Directed Practice	1	MIS12 **and** Co-MIS222
ENG124	College Composition^	3	ENG011 **or** Proficiency
		6	
	TOTAL CREDITS	**32**	

^Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.

Application criteria require ENG011 or required placement score and IDS102 or required placement score. Students are required to follow the program curriculum in effect when they begin taking technical courses, not when students are accepted to the College or program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

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NURSING

Effective Summer 2014

A student cannot register for NUR courses until accepted into the program.

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NUR121	Fundamental Concepts of Nursing I	6	*Admission to Program*	
NUR122	Nursing Care of the Child Bearing Family#	4	BIO122 **and** CHM122 **and** ENG124 **and** NUR221 **and** NUR225	
NUR123	Nursing Care of Children#	4	NUR122	
NUR221	Nursing Care of Persons with Alterations in Health I	6	BIO121 **and** CHM121 **and** NUR121 **and** PSY121	
NUR222	Nursing Care of Persons with Alterations in Health II	8	PSY123 **and** (NUR201 or NUR123)	
NUR223	Nursing Care of Persons with Alterations in Health III	8	NUR222 **and** SOC121 **and** CO-NUR224 **and** BIO221	
NUR224	Nursing Seminar	1	BIO221 **and** NUR222 **and** SOC121 **and** Co-NUR223	
	Total	**37**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101+ **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM121	Gen., Org., & Bio. Chemistry I (lab)⅄	4	HS CHM+ **or** CHM101+	
CHM122	Gen., Org., & Bio. Chemistry II (lab)	4	CHM121	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY123	Human Growth & Development	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
	Total	**35**		
	TOTAL CREDIT HOURS	**72**		

^Based on SSC placement score.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#NUR122 and NUR123 are conducted in 5-week sessions consecutively

Application criteria requires a "B" or better in BIO101 or HS BIO, and CHM101 or HS CHM to apply to the Nursing program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

NURSING

Effective Summer 2014

A student cannot register for NUR courses until accepted into the program.

First Semester		Credit Hours	Pre- and Co-requisites
NUR121	Fundamental Concepts of Nursing I	6	*Admission to Program*
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101+ **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
CHM121	Gen., Org., & Bio. Chemistry I (lab)⅄	4	HS CHM+ **or** CHM101+
		17	
Second Semester			
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123
CHM122	Gen., Org., & Bio., Chemistry II (lab)	4	CHM121
ENG124	College Composition^	3	ENG011 **or** Proficiency
NUR221	Nursing Care of Persons with Alterations in Health I	6	BIO121 **and** CHM121 **and**
		17	NUR121 **and** PSY121
Summer			
NUR122	Nursing Care of the Child Bearing Family#	4	BIO122 **and** CHM122 **and** ENG124, NUR221 **or** NUR225
NUR123	Nursing Care of Children#	4	NUR122
PSY123	Human Growth & Development	3	PSY121
		11	
Third Semester			
SOC121	Sociology^	3	IDS102 **or** Proficiency
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141
NUR222	Nursing Care of Persons with Alterations in Health II	8	PSY123 **or** NUR201 **or** NUR123
		15	
Fourth Semester			
NUR223	Nursing Care of Persons with Alterations in Health III	8	NUR222 **and** SOC121 **and** Co-NUR224 **and** BIO221
NUR224	Nursing Seminar	1	BIO221 **and** NUR222 **and** SOC121 **and** Co-NUR223
MTH124	Statistics^	3	(MTH093 and MTH094)++
		12	**or** Proficiency
	TOTAL CREDITS	**72**	

^Based on SSC placement score.

+Minimum grade of "B" required.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#NUR122 and NUR123 are conducted in 5-week sessions consecutively

Application criteria requires a "B" or better in BIO101 or HS BIO, and CHM101 or HS CHM to apply to the Nursing program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

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RN COMPLETION FOR LPN

Effective Summer 2014

A Licensed Practical Nurse (LPN) admitted to Stark State College's ADN program with Advanced Standing Admission meets the credit requirements for graduation in the following way:

- 35 credits for one calendar year curriculum
- 20 credits for nursing courses granted upon successful completion of the Transition for the LPN course
- 22 hours of prerequisite credit (see Admission Criteria and listing below)

PRE-REQUISITE CREDITS AS LISTED BELOW:				
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101*+ **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
CHM121	Gen., Org., & Bio., Chemistry I (lab)⅄	4	HS CHM+ **or** CHM101+	
CHM122	Gen., Org., & Bio., Chemistry II (lab)	4	CHM121	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
	TOTAL CREDIT HOURS	**22**		

ONE CALENDAR YEAR CURRICULUM AS LISTED BELOW:				
TECHNICAL Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
NUR201	Transition for the LPN#	5	*Admission to program*	
NUR222	Nursing Care of Persons with Alterations in Health II	8	PSY123	
NUR223	Nursing Care of Persons with Alterations in Health III	8	NUR222 **and** BIO221 **and** SOC121 **and** Co-NUR224	
NUR224	Nursing Seminar	1	BIO221 **and** NUR222 **and** SOC121 **and** Co-NUR223	
	Total	**22**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
MTH124	Statistics^**	3	(MTH093 and MTH094)++ **or** Proficiency	
PSY123	Human Growth & Development	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
	Total	**13**		
	TOTAL CREDIT HOURS	**35**		

^Based on SSC placement scores

+Minimum grade of "B" required.

++Minimum grade of "C" required.

⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#NUR 201 conducted in 8-week session for Alliance and Main Campus.

*BIO101 is waived as a prerequisite course for LPNs applying for advanced standing admissions.

**Students who begin taking technical courses Summer 2014 and after will be required to take MTH124 "Statistics". Students entering this program prior to Summer 2014, should take ENG231 "College Composition II".

Application criteria requires a "B" or better in CHM101 or HS CHM to apply to the RN Completion for the LPN program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

RN COMPLETION FOR LPN

Effective Summer 2014

Summer Semester		Credit Hours	Pre- and Co-requisites
NUR201	Transition for the LPN#	5	*Admission to Program*
PSY123	Human Growth and Development	3	PSY121
		8	
Fall Semester			
SOC121	Sociology^	3	IDS102 **or** Proficiency
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141
NUR222	Nursing Care of Persons with Alterations in Health II	8	PSY123
		15	
Spring Semester			
NUR223	Nursing Care of Persons with Alterations in Health III	8	BIO221 **and** SOC121 **and** NUR221 **and** Co-NUR224
NUR224	Nursing Seminar	1	BIO221 **and** NUR222 **and** SOC121 **and** Co-NUR223
MTH124	Statistics^**	3	(MTH093 and MTH094)++ **or** Proficiency
		12	
	TOTAL CREDITS	**35**	

^Based on SSC placement scores
++Minimum grade of "C" required.
#NUR 201 conducted in 8-week session for Alliance and Main Campus.
**Students who begin taking technical courses Summer 2014 and after will be required to take MTH124 "Statistics". Students entering this program prior to Summer 2014, should take ENG231 "College Composition II".

Application criteria requires a "B" or better in CHM101 or HS CHM to apply to the RN Completion for the LPN program.
Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

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RN COMPLETION FOR PARAMEDICS

Effective Summer 2014

A Paramedic admitted to Stark State College's ADN Program with advanced standing admission meets the credit requirements for graduation in the following way:

- 12 credits for nursing courses granted upon successful completion of the *Transition for the Paramedic* course (See Admissions Criteria)
- 44 credits for 4 semesters of course work (see listing below)
- 22 hours of prerequisite credits (see listing below)

PRE-REQUISITE CREDITS AS LISTED BELOW:				
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101*+ **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
CHM121	Gen., Org., & Bio., Chemistry I (lab)⅄	4	HS CHM+ **or** CHM101+	
CHM122	Gen., Org., & Bio., Chemistry II (lab)	4	CHM121	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
	TOTAL CREDIT HOURS	**22**		

FOUR SEMESTERS OF COURSEWORK AS LISTED BELOW:				
TECHNICAL Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
NUR225	Transition for the Paramedic	6	*Admission to Program*	
NUR122	Nursing Care of the Childbearing Family	4	NUR225 **and** BIO122 **and** CHM122 **and** ENG124	
NUR123	Nursing Care of Children	4	NUR122	
NUR222	Nursing Care of Persons with Alterations in Health II	8	PSY123	
NUR223	Nursing Care of Persons with Alterations in Health III	8	NUR222 **and** SOC121 **and** BIO221 **and** Co-NUR224	
NUR224	Nursing Seminar	1	BIO221 **and** NUR222 **and** SOC121 **and** Co-NUR223	
	Total	**31**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
MTH124	Statistics^**	3	(MTH093 and MTH094)++ **or** Proficiency	
PSY123	Human Growth & Development	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** proficiency	
	Total	**13**		
	TOTAL CREDIT HOURS	**44**		

^Based on SSC placement score
+Minimum grade of "B" required
++Minimum grade of "C" required
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
*BIO101 is waived as a prerequisite course for Paramedics seeking advanced standing admission
**Students who begin taking technical courses Summer 2014 and after will be required to take MTH124 "Statistics". Students entering this program prior to Summer 2014 should take ENG231 "College Composition II".

Application criteria require a "B" or better in BIO101 or HS BIO, and CHM101 or HS CHM to apply to the RN Completion for the Paramedic program.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

RN COMPLETION FOR PARAMEDICS

Effective Summer 2014

Fall Semester		Credit Hours	Pre- and Co-requisites
NUR 225	Transition for the Paramedic	**6**	*Admission to Program.*
Spring Semester			
NUR 122	Nursing Care of the Childbearing Family	4	NUR225 **and** BIO122 **and** CHM122 **and** ENG124
NUR 123	Nursing Care of Children	4	NUR122
PSY 123	Human Growth and Development	3	PSY121
		11	
Summer Semester			
SOC 121	Sociology^	3	IDS102 **or** Proficiency
BIO 221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141
NUR 222	Nursing Care of Persons with Alterations in Health II	8	PSY123
		15	
Fall Semester			
NUR 223	Nursing Care of Persons with Alterations in Health III	8	NUR222 **and** SOC121 **and** BIO221 **and** Co-NUR224
NUR 224	Nursing Seminar	1	BIO221 **and** NUR222, SOC121 **and** Co-NUR223
MTH124	Statistics^**	3	(MTH093 and MTH094)++ **or** Proficiency
		12	
	TOTAL CREDITS	**44**	

^Based on SSC placement score
++Minimum grade of "C" required
**Students who begin taking technical courses Summer 2014 and after will be required to take MTH124 "Statistics". Students entering this program prior to Summer 2014 should take ENG231 "College Composition II".

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

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OCCUPATIONAL THERAPY ASSISTANT

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
OTA121	Foundations of Occupational Therapy	3	Co-OTA122	
OTA122	Therapeutic Media	3	Co-OTA121	
OTA123	Psychosocial Aspects in OT	4	OTA121 **and** OTA122 **and** PSY121 **and** Co-OTA124 **and** Co-PSY221	
OTA124	Psychosocial Clinical Experience	3	OTA121 **and** OTA122 **and** Co-OTA123	
OTA221	Developmental Aspects in OT	4	(BIO123 **or** BIO122) **and** OTA123 **and** Co-OTA222	
OTA222	Developmental Clinical Experience	3	(BIO123 **or** BIO122) **and** OTA124 **and** Co-221	
OTA224	OT in Physical Dysfunction	4	OTA221 **and** Co-OTA225 **and** Co-BIO124	
OTA225	Physical Dysfunction Clinical Experience	3	OTA222 **and** Co-OTA224	
OTA226	OTA Seminar	2	OTA224 **and** OTA225 and Co-OTA227 **and** Co-OTA228	
OTA227	Clinical Application I	3	OTA224 **and** OTA225 **and** Co-OTA226	
OTA228	Clinical Application II	3	OTA224 **and** OTA225 **and** Co-OTA226	
	Total	**35**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO123	Principles of Human Structure & Function (lab)#	5	BIO101+ **or** BIO127	
BIO124	Human Diseases	3	BIO123 **or** BIO122	
BIO125	Medical Terminology	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH105	Math for Allied Health^ Ω	3	(MTH091 and MTH092)+ **or** Proficiency	
OTA223	Life Span Development	5	ENG124	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY221	Abnormal Psychology	3	PSY121 **and** Co-OTA123	
PTA226	Functional Anatomy	4	BIO123 **or** BIO122	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
	Total	**35**		
	TOTAL CREDIT HOURS	**70**		

^Based on SSC placement score.

#BIO121 and BIO122 can be substituted for BIO123.

+Minimum grade of "B" required.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria require a "B" or better in BIO101, HS BIO, and (MTH91 and MTH092) or Proficiency to apply to the OTA program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

OCCUPATIONAL THERAPY ASSISTANT

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
PSY121	General Psychology^	3	IDS102 **or** Proficiency
OTA121	Foundations of Occupational Therapy	3	Co-OTA122
OTA122	Therapeutic Media	3	Co-OTA121
ENG124	College Composition^	3	ENG011 **or** Proficiency
BIO125	Medical Terminology	3	
		15	
Second Semester			
MTH105	Math for Allied Health^ Ω	3	(MTH091 and MTH092) **or** Proficiency+
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101+ **or** BIO127
OTA123	Psychosocial Aspects in OT	4	OTA121 **and** OTA122 **and** PSY121 **and** Co-OTA124 **and** Co-PSY221
OTA124	Psychosocial Clinical Experience	3	OTA121 **and** OTA122 **and** Co-OTA123
PSY221	Abnormal Psychology	3	PSY121 **and** Co-OTA123
		18	
Third Semester			
OTA221	Developmental Aspects in OT	4	(BIO123 **or** BIO122) **and** OTA123 **and** Co-OTA222
OTA222	Developmental Clinical Experience	3	(BIO123 **or** BIO122) **and** OTA124 **and** Co-OTA221
OTA223	Life Span Development	5	ENG124
PTA226	Functional Anatomy	4	BIO123 **or** BIO122
		16	
Fourth Semester			
SOC121	Sociology^	3	IDS102 **or** Proficiency
BIO124	Human Diseases (lab)	3	BIO122 **or** BIO123
OTA224	OT in Physical Dysfunction	4	OTA221 **and** Co-OTA225 **and** Co-BIO124
OTA225	Physical Dysfunction Clinical Experience	3	OTA222 **and** Co-OTA224
		13	
Fifth Semester			
OTA226	OTA Seminar	2	OTA224 **and** OTA225 Co-OTA227 **and** Co-OTA228
OTA227	Clinical Application I	3	OTA224 **and** OTA225 **and** Co-OTA226
OTA228	Clinical Application II	3	OTA224 **and** OTA225 **and** Co-OTA226
		8	
	TOTAL CREDITS	**70**	

^Based on SSC placement score.

#BIO121 and BIO122 can be substituted for BIO123.

+Minimum grade of "B" required.

ΩMTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Application criteria require a "B" or better in BIO101, HS BIO, and (MTH91 and MTH092) or Proficiency to apply to the OTA program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION
ASSOCIATE OF APPLIED SCIENCE

3150

PHYSICAL THERAPIST ASSISTANT

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PTA121	Fundamentals of Physical Therapy	4		
PTA122	Musculoskeletal Anatomy	4	BIO123 **or** BIO122	
PTA123	Kinesiology	4	PHY101 **and** PTA122 **and** Co-PTA221	
PTA124	Measurement Procedures for the PTA	2	PTA123 **and** PTA221	
PTA125	Professional Clinical Practice for the PTA	1	PTA123 **and** PTA221	
PTA221	PTA Procedures I	5	PTA121 **and** PTA122 **and** Co- PTA123	
PTA223	PTA Procedures III	2	PTA224 **and** PTA225	
PTA224	PTA Procedures II Ortho	3	BIO124 **and** PTA124 **and** PTA125 **and** Co-PTA225 **and** Co-PTA228 **and** Co-PTA229	
PTA225	PTA Procedures II Neuro	3	BIO124 **and** PTA124 **and** PTA125 **and** Co-PTA224 **and** Co-PTA228 **and** Co-PTA229	
PTA227	Directed Practice III	3		
PTA228	Seminar I	2	PTA124 **and** PTA125 **and** Co-PTA224 **and** Co-PTA225 **and** Co-PTA229	
PTA229	Directed Practice I	3	PTA124 **and** PTA125 **and** Co-PTA224 **and** Co-PTA225 **and** Co-PTA228	
PTA230	Seminar II	1	PTA224 **and** PTA225 **and** PTA228 **and** PTA229	
PTA231	Directed Practice II	2	PTA229	
	Total	**39**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101+ **or** BIO127	
BIO124	Human Diseases	3	BIO123 **or** BIO122	
BIO125	Medical Terminology	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH124	Statistics^*	3	(MTH093 and MTH094) **or** Proficiency+	
OTA223	Life Span Development	5	ENG124	
PHY101	Principles of Physics (lab)^	4	(MTH123 or Proficiency) **and** (IDS102 or Proficiency)	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY222	Psychological Aspects of Therapy^	3	IDS102 **or** Proficiency	
	Total	**32**		
	TOTAL CREDIT HOURS	**71**		

^Based on SSC placement scores
+Minimum grade of "B" required.
#BIO121 and BIO122 can be substituted for BIO123.
*MTH125 College Algebra may be substituted for MTH124 Statistics

Application criteria require a "B" or better in BIO101 or HS BIO, and (MTH093 and MTH094) or Proficiency to apply to the PTA program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

PHYSICAL THERAPIST ASSISTANT

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
PHY101	Principles of Physics (lab)^	4	(MTH123 or Proficiency) **and (**IDS102 or Proficiency)
PTA121	Fundamentals of Physical Therapy	4	
PTA122	Musculoskeletal Anatomy	4	BIO123 **or** BIO122
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101++ **or** BIO127
		17	
Second Semester			
MTH124	Statistics^*	3	(MTH093 and MTH094) **or** Proficiency+
PTA123	Kinesiology	4	PHY101 **and** PTA122 **and** Co-PTA221
BIO124	Human Diseases	3	BIO123 **or** BIO122
BIO125	Medical Terminology	3	
PTA221	PTA Procedures I	5	PTA121 **and** PTA122 **and** Co-PTA123
		18	
Third Semester			
PSY121	General Psychology^	3	IDS102 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
PTA124	Measurement Procedures for the PTA	2	PTA123 **and** PTA221
PTA125	Professional Clinical Practice for the PTA	1	PTA123 **and** PTA221
		9	
Fourth Semester			
PSY222	Psychological Aspects of Therapy^	3	IDS102 **or** Proficiency
PTA224	PTA Procedures II Ortho	3	BIO124, PTA124, PTA125, Co-PTA225, Co-PTA228 **and** Co-PTA229
PTA225	PTA Procedures II Neuro	3	BIO124, PTA124, PTA125, Co-PTA224, Co-PTA228 **and** Co-PTA229
OTA223	Life Span Development	5	ENG124
PTA229	Directed Practice I	3	PTA124, PTA125, Co-PTA224 Co-PTA225 **and** Co-PTA228
PTA228	Seminar I	2	PTA124, PTA125 Co-PTA224, Co-PTA225 **and** Co-PTA229
		19	
Fifth Semester			
PTA223	PTA Procedures III	2	PTA224 **and** PTA225
PTA227	Directed Practice III	3	
PTA230	Seminar II	1	PTA224, PTA225, PTA228 **and** PTA229
PTA231	Directed Practice II	2	PTA229
		8	
	TOTAL CREDITS	**71**	

^Based on SSC placement scores
+Minimum grade of "B" required.
#BIO121 and BIO122 can be substituted for BIO123.
*MTH125 College Algebra may be substituted for MTH124 Statistics

Application criteria require a "B" or better in BIO101 or HS BIO, and (MTH093 and MTH094) or Proficiency to apply to the PTA program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

ASSOCIATE OF APPLIED SCIENCE

3200

RESPIRATORY CARE

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
RCT121	Introduction to Respiratory Care	3		
RCT122	Medical Gas Administration	3		
RCT124	Pharmacology for R.T.	2		
RCT123	Airway Management Procedures	3	RCT124	
RCT125	Clinical Practice Basic Procedures/Seminar	3	RCT124	
RCT129	Respiratory Diseases	3	RCT124	
RCT126	Introduction to Critical Care	3	RCT129	
RCT128	Clinical Practice Airway Management/Seminar	2	RCT125	
RCT220	Cardiopulmonary A & P	3	RCT126	
RCT224	Clinical Practice Critical Care/Seminar	3	RCT 128	
RCT226	Advanced Respiratory Care Procedures Laboratory	1	RCT126 **and** Co-RCT227	
RCT227	Neonatal/Pediatrics for Respiratory Care	3	RCT126 **and** Co-RCT226	
RCT223	Patient Assessment and Monitoring	3	RCT220	
RCT225	Clinical Practice Specialty Rotations/Sem.	5	RCT224	
	TOTAL	**40**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
CHM121	Gen., Org., & Bio., Chemistry I (lab)⍋	4	HS CHM+ **or** CHM101+	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH124 **or** MTH125	Statistics^ **or** College Algebra^	3-4	(MTH093 and MTH094) **or** Proficiency+	
BIO123	Principles of Human Structure & Function (lab)#	5	BIO101+ **or** BIO127	
BIO125	Medical Terminology	3		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO 141	
	Social Science Elective^ [1]	3	IDS102 **or** Proficiency	
	Psychology Elective^ [2]	3	IDS102 **or** Proficiency	
	Total	**32-33**		
	TOTAL CREDIT HOURS	**72-73**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

⍋Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#BIO121 and BIO122 can be substituted for BIO123.

[1] May select from Sociology offerings only

[2] May select from Psychology offerings only

Application criteria require a "B" or better in BIO101 or HS BIO, CHM101 or HS CHM, and (MTH093 and MTH094) or Proficiency to apply to the RCT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Respiratory Care courses must be taken in the order listed below.

RESPIRATORY CARE

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
RCT121	Introduction to Respiratory Care	3	
RCT122	Medical Gas Administration	3	
RCT124	Pharmacology for R.T.	2	
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101+ **or** BIO127
BIO125	Medical Terminology	3	
		17	
Second Semester			
CHM121	Gen., Org., & Bio., Chemistry I (lab)⍋	4	HS CHM+ **or** CHM101+
RCT123	Airway Management Procedures	3	RCT124
RCT125	Clinical Practice Basic Procedures/Seminar	3	RCT 124
MTH124 **or** MTH125	Statistics ^ **or** College Algebra^	3-4	(MTH093 and MTH094) **or** Proficiency+
RCT129	Respiratory Diseases	3	RCT124
		16-17	
Summer			
RCT126	Introduction to Critical Care	3	RCT129
RCT128	Clinical Practice Airway Management/Seminar	2	RCT125
ENG124	College Composition^	3	ENG011 **or** Proficiency
		8	
Third Semester			
Social Science Elective^ [1]		3	IDS102 **or** Proficiency
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141
RCT220	Cardiopulmonary A&P	3	RCT126
RCT224	Clinical Practice Critical Care/Seminar	3	RCT128
RCT226	Advanced Respiratory Care Procedures Laboratory	1	RCT126 **and** Co-RCT227
RCT227	Neonatal/Pediatrics for Respiratory Care	3	RCT 126 **and** Co-RCT226
		17	
Fourth Semester			
ITD122	Computer Applications for Professionals ^	3	ITD100 **or** Proficiency
Psychology Elective^ [2]		3	IDS102 **or** Proficiency
RCT223	Patient Assessment and Monitoring	3	RCT220
RCT225	Clinical Practice Specialty Rotations/Seminar	5	RCT224
		14	
	TOTAL CREDITS	**72-73**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

⍋Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

#BIO121 and BIO122 can be substituted for BIO123.

[1] May select from Sociology offerings only

[2] May select from Psychology offerings only

Application criteria require a "B" or better in BIO101 or HS BIO, CHM101 or HS CHM, and (MTH093 and MTH094) or Proficiency to apply to the RCT program.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Revised 02/2014

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

1005

FAMILY SERVICES

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EDU131	Introduction to Childhood Development^++	3	ENG011 **or** Proficiency	
SOC123	Dynamics of the Family++	3		
SOC225	Cultural Diversity++	3		
EDU223	Community and Family Based Programs++	3	EDU 131	
SWK121	Introduction to Social Welfare++	3		
SWK224	Poverty in the U.S.++	3	SWK 121	
SWK225	Victimization and Crisis Intervention++	3		
	TOTAL CREDIT HOURS	**21**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
EDU131	Introduction to Childhood Development^++	3	ENG011 **or** Proficiency
SWK121	Introduction to Social Welfare++	3	
SOC123	Dynamics of the Family++	3	
		9	
Second Semester			
SOC225	Cultural Diversity++	3	
EDU223	Community and Family Based Programs++	3	EDU131
SWK225	Victimization and Crisis Intervention++	3	
SWK224	Poverty in the U.S.++	3	SWK121
		12	
	TOTAL CREDITS	**21**	

^ Based on SSC placement score.
++Minimum grade of "C" required.

Revised 2/2014

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

1006

GERONTOLOGY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
GER121	Introduction to Gerontology++	3		
GER122	Psychosocial Aspects of Aging++	3		
	Technical Elective 1: Select one (1) from list below*****++	2-5		
	Technical Elective 2: Select one (1) from list below******++	3-5		
	TOTAL CREDIT HOURS	**11-16**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
GER121	Introduction to Gerontology++	3	
GER122	Psychosocial Aspects of Aging++	3	
*Technical Elective 1******++		2-5	
*Technical Elective 2*******++		3-5	
	TOTAL CREDITS	**11-16**	

++Minimum grade of "C" required.

*****Technical Electives 1: FIN123; FIN224; HIT230; ENG124; OTA223; PSY121; PSY123; SWK230

******Technical Elective 2: BIO121; BIO122; BIO101; BIO123; BIO127; ACC132; FIN222; MAT231

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

1007

HUMAN AND SOCIAL SERVICES – CHEMICAL DEPENDENCY MAJOR

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SWK125	Substance Abuse++	3		
SWK225	Victim and Crisis Intervention	3		
CDC121	Chemical Dependency: Assessment and Treatment Planning++	3	SWK125	
CDC122	Fundamentals of Chemical Dependency Practice I++	3	SWK125	
CDC221	Chemical Dependency and the Family++	3	SWK125	
CDC222	Fundamentals of Chemical Dependency Practice II++	3	CDC122	
CDC223	Chemical Dependency and Prevention++	1	SWK125	
CDC224	Chemical Dependency and Ethics++	1	SWK125	
	TOTAL CREDIT HOURS	**20**		

++Minimum grade of "C" required.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

HUMAN AND SOCIAL SERVICES – CHEMICAL DEPENDENCY MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SWK125	Substance Abuse++	3	
SWK225	Victim and Crisis Intervention	3	
		6	
Second Semester			
CDC121	Chemical Dependency Assessment and Treatment Planning++	3	SWK125
CDC122	Fundamentals of Chemical Dependency Practice I++	3	SWK125
CDC223	Chemical Dependency and Prevention++	1	SWK125
		7	
Third Semester			
CDC221	Chemical Dependency and the Family++	3	SWK125
CDC222	Fundamentals of Chemical Dependency II++	3	CDC122
CDC224	Chemical Dependency and Ethics++	1	SWK125
		7	
	TOTAL CREDITS	**20**	

++Minimum grade of “C” required.

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

3403

DENTAL ASSISTING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DAS128	Introduction to Dental Terminology and Basic Anatomy	2		
DAS121	Dental Assisting Techniques I	3		
DAS122	Dental Assisting Radiography	2		
DAS123	Dental Assisting Techniques II	3	DAS121	
DAS124	Dental Assisting Materials	2		
DAS125	Dental Assisting Specialty* *(optional)*	3	DAS123	
	TOTAL CREDIT HOURS	**12-15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
DAS128	Introduction to Dental Terminology and Basic Anatomy	2	
DAS121	Dental Assisting Techniques I	3	
DAS122	Dental Assisting Radiography	2	
DAS123	Dental Assisting Techniques II	3	DAS121
DAS124	Dental Assisting Materials	2	
		12	
Second Semester			
DAS125	Dental Assisting Specialty***** *(optional)*	3	DAS 123
		3	
	TOTAL CREDITS	**12-15**	

*****Students may select a dental assisting course option in which to gain specialized skills: Dental Office Management, Community Dentistry or Clinical Dental Assisting.

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

3423

EXPANDED FUNCTIONS DENTAL AUXILIARY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DAS128	Introduction to Dental Terminology and Basic Anatomy*****	2		
DAS226	Expanded Dental Assisting I	1	Co-DAS227	
DAS227	Expanded Dental Assisting II	2	Co-DAS226	
DAS228	Directed Clinical Practice	4	DAS227	
	TOTAL CREDIT HOURS	**9**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
DAS128	Introduction to Dental Terminology and Basic Anatomy*	2	
DAS226	Expanded Dental Assisting I	1	Co-DAS227
DAS227	Expanded Dental Assisting II	2	Co-DAS226
		5	
Second Semester			
DAS228	Directed Clinical Practice	4	DAS227
		4	
	TOTAL CREDITS	**9**	

*****Successful completion of DAS128 is required prior to beginning any other EFDA required courses for students not currently working chair side in a dental office or completing their first year of a dental hygiene curriculum.

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

3455

SPORTS MASSAGE SPECIALIST

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO121	Anatomy and Physiology I (lab)^⅄++	4	BIO101+ **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)++	4	BIO121 **or** BIO123	
MAS121	Massage Therapy I+	6		
MAS231	Sports Massage+	2	MAS121	
NTR121	Basic Medical Nutrition^++	3	IDS102 **or** Proficiency	
PTA226	Functional Anatomy++	4	BIO123 **or** BIO122	
	TOTAL CREDIT HOURS	**23**		

^Based on SSC placement scores.
+Minimum grade of "B" required.
++Minimum grade of "C" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to Massage program.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

SPORTS MASSAGE SPECIALIST

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
BIO121	Anatomy and Physiology I (lab)^⅄++	4	BIO101+ **or** Proficiency
MAS121	Massage Therapy I+	6	
		10	
Second Semester			
BIO122	Anatomy and Physiology II (lab)++	4	BIO121 **or** BIO123
NTR121	Basic Medical Nutrition^++	3	IDS102 **or** Proficiency
		7	
Third Semester			
MAS231	Sports Massage+	2	MAS121
PTA226	Functional Anatomy++	4	BIO123 **or** BIO122
		6	
	TOTAL CREDITS	**23**	

^Based on SSC placement scores.
+Minimum grade of "B" required.
++Minimum grade of "C" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Application criteria requires a "B" or better in BIO101 or HS BIO to apply to Massage program.

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

3456

MASSAGE TRANSITION TO LICENSURE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAS223	Massage Therapy Review	3	(BIO122 **or** BIO123) and Co-MAS226	
MAS230 **or** MAS226	Limited Branch Massage Therapy Review **or** Massage Therapy V	3	None MAS225 **and** MAS124	
MAS228	Professional Practice and Evaluation	1	MAS122	
HTD229	Massage Therapy Independent Study	1		
MAS122	Massage Therapy II	2	MAS121 **and** MAS123	
BIO123	Principles of Human Structure and Function	5	BIO101 **and** BIO121	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Semester 1		Credit Hours	Pre- and Co-requisites
MAS122	Massage Therapy II	2	MAS121 **and** MAS123
BIO123	Principles of Human Structure and Function	5	BIO101 **and** BIO121
		7	
Semester 2			
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) **and** Co-MAS226
MAS230	Limited Branch Massage Therapy Review		
or	**or**		
MAS226	Massage Therapy V	3	MAS225 **and** MAS124
MAS228	Professional Practice and Evaluation	1	MAS122
HTD229	Massage Therapy Independent study	1	
		8	
	TOTAL CREDITS	**15**	

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

3504

MEDICAL INSTRUMENT STERILIZATION TECHNICIAN

Effective Summer 2014

Students must currently work in the field or have one-year previous working experience in central service processing to apply.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MIS124	Medical Instrument Sterilization I*	4	Co-BIO101 **and** Co- BIO125* *Advisor Approval Required*	
MIS126	Medical Instrument Sterilization II	4	MIS124	
MIS123	Introduction to Surgical Terminology/Microbiology	3	MIS124	
MIS222	Medical Instrument Sterilization III	2	MIS123 **and** MIS126	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
	TOTAL CREDIT HOURS	**16**		

^Based on SSC placement scores.

*BIO125 co-requisite will be waived for the Career Enhancement Certificate.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Medical Instrument Sterilization courses must be taken in the order listed below.

MEDICAL INSTRUMENT STERILIZATION TECHNICIAN

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
MIS124	Medical Instrument Sterilization I*	4	Co-BIO101 **and** Co- BIO125*
		7	
Second Semester			
MIS126	Medical Instrument Sterilization II	4	MIS124
MIS123	Introduction to Surgical Terminology/Microbiology	3	MIS124
		7	
Summer			
MIS222	Medical Instrument Sterilization III	2	MIS123 **and** MIS126
		2	
	TOTAL CREDITS	**16**	

^Based on SSC placement scores.
*BIO125 co-requisite will be waived for the Career Enhancement Certificate.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

HEALTH AND HUMAN SERVICES DIVISION

CAREER ENHANCEMENT CERTIFICATE

3566

DIETARY MANAGER

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DMA121	ServSafe	1		
DMA123	Nutrition/Medical Nutrition Therapy for Dietary Manager	3		
DMA124	Nutrition/ MNT Therapy for Dietary Managers Experience	3	Co-DMA123	
DMA125	Management of Foodservice Operations for the Dietary Manager	3		
DMA126	Management of Foodservice Operations for the Managers Experience	3	Co-DMA125	
DMA122	ServSafe Experience	1	Co-DMA126	
MGT224	Human Resource Management for Dietary Managers	3	DMA125	
DMA128	Dietary Operations Delivery Experience	3	Co-MGT224	
	TOTAL CREDIT HOURS	**20**		

The student has the option of taking classes during the summer. Field experience can be arranged with permission. This coursework is incompliance with the requirements of the Dietary Manager's Association and upon completion the student is eligible to take the national certification examination.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

DIETARY MANAGER

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
DMA121	ServSafe	1	
DMA123	Nutrition/Medical Nutrition Therapy	3	
DMA124	Nutrition/Medical Nutrition Therapy Experience	3	Co-DMA 123
		7	
Second Semester			
DMA125	Management of Foodservice Operations	3	
DMA126	Management of Foodservice Operations Experience	3	Co-DMA125
DMA122	ServSafe Field Experience	1	Co-DMA126
		7	
Third Semester			
MGT224	Human Resource Management for Dietary Managers	3	DMA125
DMA128	Dietary Operations Delivery Experience	3	Co-MGT224
		6	
	TOTAL CREDITS	**20**	

The student has the option of taking classes during the summer. Field experience can be arranged with permission. This coursework is incompliance with the requirements of the Dietary Manager's Association and upon completion the student is eligible to take the national certification examination.

INFORMATION TECHNOLOGIES

In an effort to meet the needs of students, courses required in each of the programs are scheduled in sequence to accommodate those attending on a full-time or part-time basis. All students should consult their academic advisors to plan their schedules and course sequence appropriately. In order to keep pace with progress, the College reserves the right to change fees, academic programs, course descriptions, or any other statements, contained in this catalog at the discretion of the College or its Board of Trustees.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

5300

3D MOTION GRAPHICS TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT125	3D Graphics Modeling	3	IMT122	
IMT136	Principles of Animation	3		
IMT227	3D Graphics Animation	3	IMT136 **and** IMT125	
IMT237	Compositing	3	IMT223 **or** IMT125	
IMT240	Advanced 3D Graphics Modeling	3	IMT125	
IMT243	Advanced Compositing	3	IMT237	
IMT245	Graphic Arts Design II	3	IMT122	
IMT249	Textures & Effects for 2D & 3D Design	3	IMT125	
IMT265	Motion Graphics Portfolio	3	IMT268	
IMT268	Advanced Video Editing	3	IMT223	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO126	Science, Energy, & the Environment (lab)	4		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD123	Mac Concepts	1		
IMT121	Interactive Media	3		
IMT122	Graphic Arts Design	3		
IMT137	Drawing Basics	3		
IMT223	Digital Video Recording and Editing	3	IMT121	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
	*Select one (1) Social Science Elective from the list below.**	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

*****Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

3D MOTION GRAPHICS TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
IMT121	Interactive Media	3	
IMT122	Graphic Arts Design	3	
IMT136	Principles of Animation	3	
IMT137	Drawing Basics	3	
		13	
Second Semester			
ITD123	Mac Concepts	1	
IMT125	3D Graphics Modeling	3	IMT122
IMT223	Digital Video Recording and Editing	3	IMT121
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
		13	
Summer Semester			
COM121	Effective Speaking	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		6	
Third Semester			
IMT227	3D Graphics Animation	3	IMT136 **and** IMT125
IMT237	Compositing	3	IMT223 **or** IMT125
IMT240	Advanced 3D Graphics Modeling	3	IMT125
IMT268	Advanced Video Editing	3	IMT223
IMT249	Textures & Effects for 2D & 3D Design	3	IMT125
		15	
Fourth Semester			
BIO126	Science, Energy, & the Environment (lab)	4	
IMT243	Advanced Compositing	3	IMT237
IMT245	Graphic Arts Design II	3	IMT122
IMT265	Motion Graphics Portfolio	3	IMT268
*Social Science Elective**		3	*Check for pre-requisites*
		16	
	TOTAL CREDITS	**63**	

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

*****Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2120

ADMINISTRATIVE OFFICE PROFESSIONAL

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting	3		
AOT129	Keyboarding Skill Building	1	AOT121	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
AOT128	Desktop Publishing Microsoft Publisher▲	3	ITD122 **and** IMT122	
ACC121	Principles of Accounting	4		
IMT122	Graphic Arts Design	3		
AOT130	Editing, Proofreading & Language Skills	3		
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)	
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
AOT236	Database Applications Microsoft Access^▲	3	ITD100 **or** Proficiency	
AOT134	Form Design Essentials▲	1		
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
AOT132	Records Management^	3	IDS102 **or** Proficiency	
AOT232	AOT Practicum+++▲	2	AOT227 **or** AOT237	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
ACC130	Business Law and Ethics	3		
AOT227	Administrative Procedures & Systems▲	3	ITD122 **and** AOT130 **and** (AOT121 or AOT129)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOC225	Cultural Diversity	3		
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ITD108	Microsoft Outlook^	1	IDS102 **or** Proficiency	
	Total	**32**		
	TOTAL CREDIT HOURS	**62**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
+++Legal Assisting should complete AOT237; AOP students should take AOT227
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ADMINISTRATIVE OFFICE PROFESSIONAL

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
AOT130	Editing, Proofreading & Language Skills	3	
AOT121	Keyboarding/Formatting	3	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
IMT122	Graphic Arts Design	3	
AOT134	Form Design Essentials▲	1	
		17	
Second Semester			
BUS121	Business Administration^	4	IDS102 **or** Proficiency
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)
AOT129	Keyboarding Skill Building	1	AOT121
AOT128	Desktop Publishing Microsoft Publisher▲	3	ITD122 **and** IMT122
AOT132	Records Management^	3	IDS102 **or** Proficiency
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		17	
Third Semester			
AOT226	Spreadsheets Microsoft Excel^▲	3	ITD100 **or** Proficiency
AOT227	Administrative Procedures & Systems▲	3	ITD122 **and** AOT130 **and** (AOT121 or AOT129)
ACC130	Business Law and Ethics	3	
SOC225	Cultural Diversity	3	
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
		15	
Fourth Semester			
ACC121	Principles of Accounting	4	
COM121	Effective Speaking	3	
AOT232	AOT Practicum+++▲	2	AOT227 **or** AOT237
AOT236	Database Applications Microsoft Access^▲	3	ITD100 **or** Proficiency
ITD108	Microsoft Outlook^	1	IDS102 **or** Proficiency
		13	
	TOTAL CREDITS	**62**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
+++Legal Assisting should complete AOT237; AOP students should take AOT227
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

2122

ADMINISTRATIVE OFFICE PROFESSIONAL (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting	3		
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)	
AOT130	Editing, Proofreading, & Language Skills	3		
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
AOT227	Administrative Procedures and Systems▲	3	ITD122 **and** AOT130 **and** (AOT121 or AOT129)	
AOT132	Records Management^	3	IDS102 **or** Proficiency	
AOT134	Form Design Essentials▲	1		
	Total	**22**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 **and** MTH092)♦ or Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOC225	Cultural Diversity	3		
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
	Total	**13**		
	TOTAL CREDIT HOURS	**35**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ADMINISTRATIVE OFFICE PROFESSIONAL (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
AOT130	Editing, Proofreading, & Language Skills	3	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
AOT121	Keyboarding/Formatting	3	
AOT134	Form Design Essentials▲	1	
		14	
Second Semester			
AOT132	Records Management^	3	IDS102 **or** Proficiency
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)
AOT227	Administrative Procedures & Systems▲	3	ITD122 **and** AOT130 **and** (AOT121 **or** AOT129)
SOC225	Cultural Diversity	3	
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
		15	
Third Semester			
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
AOT226	Spreadsheets Microsoft Excel^▲	3	ITD100 **or** Proficiency
		6	
	TOTAL CREDITS	**35**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2123

ADMINISTRATIVE OFFICE PROFESSIONAL – MANAGEMENT MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting	3		
MGT121	Principles of Management	3	BUS121 **or** ENT120	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)	
ACC121	Principles of Accounting	4		
MGT221	Supervision	3	MGT121	
ACC227	Payroll Accounting	3	ACC121 **or** ACC132	
AOT130	Editing, Proofreading & Language Skills	3		
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)	
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
	Total	**31**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
AOT132	Records Management^	3	IDS102 **or** Proficiency	
AOT232	AOT Practicum+++▲	2	AOT227 **or** AOT237	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
ACC130	Business Law and Ethics	3		
AOT227	Administrative Procedures and Systems▲	3	ITD122 **and** AOT130 **and** (AOT121 or AOT129)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOC225	Cultural Diversity	3		
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ITD108	Microsoft Outlook^	1	IDS102 **or** Proficiency	
	Total	**32**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

+++Legal Assisting should complete AOT237; AOP students should take AOT227

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Revised 9/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ADMINISTRATIVE OFFICE PROFESSIONAL – MANAGEMENT MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
AOT130	Editing, Proofreading & Language Skills	3	
AOT121	Keyboarding/Formatting	3	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
BUS121	Business Administration^	4	IDS102 **or** Proficiency
		17	
Second Semester			
ACC121	Principles of Accounting	4	
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)
MGT121	Principles of Management	3	BUS121 **or** ENT120
ITD108	Microsoft Outlook^	1	IDS102 **or** Proficiency
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		14	
Third Semester			
AOT226	Spreadsheets Microsoft Excel^▲	3	ITD100 **or** Proficiency
AOT227	Administrative Procedures & Systems▲	3	ITD122 **and** AOT130 **and** (AOT121 or AOT129)
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
MGT221	Supervision	3	MGT121
SOC225	Cultural Diversity	3	
ACC227	Payroll Accounting	3	ACC121 **or** ACC132
		18	
Fourth Semester			
ACC130	Business Law and Ethics	3	
COM121	Effective Speaking	3	
AOT132	Records Management^	3	IDS102 **or** Proficiency
AOT232	AOT Practicum+++▲	2	AOT227 **or** AOT237
ACC229	Computerized Accounting Applications	3	(AOT226 or ITD122) **and** (ACC121 or ACC132 or ENT123)
		14	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

+++Legal Assisting should complete AOT237; AOP students should take AOT227

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2124

ADMINISTRATIVE OFFICE PROFESSIONAL – VIRTUAL OFFICE PROFESSIONAL MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting	3		
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
ACC121	Principles of Accounting	4		
IMT122	Graphic Arts Design	3		
AOT128	Desktop Publishing Microsoft Publisher▲	3	ITD122 **and** IMT122	
AOT130	Editing, Proofreading & Language Skills	3		
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)	
AOT226	Spreadsheet Microsoft Excel^+▲	3	ITD100 **or** Proficiency	
AOT236	Database Applications Microsoft Access^▲	3	ITD100 **or** Proficiency	
AOT227	Administrative Procedures & Systems▲	3	ITD122 **and** AOT130 **and** (AOT121 or AOT129)	
ITD108	Microsoft Outlook^	1	IDS102 **or** Proficiency	
AOT134	Form Design Essentials▲	1		
	Total	**33**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
AOT232	AOT Practicum+++▲	2	AOT227 **or** AOT237	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
ACC130	Business Law & Ethics	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOC225	Cultural Diversity	3		
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
COM122	Interpersonal Communications	3		
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
ENT121	Entrepreneurial Marketing	3	ENT120	
ENT221	Entrepreneurial Finance	3	ENT120	
	Total	**34**		
	TOTAL CREDIT HOURS	**67**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
+++Legal Assisting should complete AOT237; AOP students should take AOT227
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

ADMINISTRATIVE OFFICE PROFESSIONAL – VIRTUAL OFFICE PROFESSIONAL MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
AOT130	Editing, Proofreading & Language Skills	3	
AOT121	Keyboarding/Formatting	3	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
IMT122	Graphic Arts Design	3	
AOT134	Form Design Essentials▲	1	
		17	
Second Semester			
BUS121	Business Administration^	4	IDS102 **or** Proficiency
AOT127	Word Processing Microsoft Word^	3	AOT121 **and (**ITD100 or Proficiency)
ACC121	Principles of Accounting	4	
AOT128	DPT-Microsoft Publisher▲	3	ITD122 **an**d IMT122
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		20	
Third Semester			
AOT226	Spreadsheets Microsoft Excel^▲	3	ITD100 **or** Proficiency
AOT227	Administrative Procedures & Systems▲	3	ITD122 **and** AOT130 **and** (AOT121 or AOT129)
ACC130	Business Law and Ethics	3	
SOC225	Cultural Diversity	3	
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
ENT121	Entrepreneurial Marketing	3	ENT120
		18	
Fourth Semester			
COM122	Interpersonal Communications	3	
AOT232	AOT Practicum+++▲	2	AOT227 **or** AOT237
AOT236	Database Applications Microsoft Access^▲	3	ITD100 **or** Proficiency
ENT221	Entrepreneurial Finance	3	ENT120
ITD108	Microsoft Outlook^	1	IDS102 **or** Proficiency
		12	
	TOTAL CREDITS	**67**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

+++Legal Assisting should complete AOT237; AOP students should take AOT227

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

5350

COMPUTER ENGINEERING

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE233	C++ Programming▲	3	CSE122	
CSE231	Java Programming▲	3	CSE122	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
CSE232	Advanced Java Programming	3	CSE231	
EET227	PLC's & Industrial Controls I	3	EST130 **or** EET120	
EET228	PLC's & Industrial Controls II	3	EET227	
EET262	Pulse and Digital Integrated Circuits	4	CSE229 **or** CSE233	
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)♦♦ **or** Proficiency	
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
	Total	**32**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)♦♦ **or** Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Social Science Elective from the list below ****	3	*Check for pre-requisites*	
	Total	**31**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

▲ Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER ENGINEERING

Effective Summer 2014

First Semester	Course Title	Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
ENG124	College Composition^	3	ENG011 **or** Proficiency
EST130	Electrical Circuits and Devices^	4	(MTH093 and MTH094)♦♦ **or** Proficiency
		14	
Second Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
CSE231	Java Programming	3	CSE122
CSE233	C++ Programming	3	CSE122
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	3	
		15	
Summer Semester			
*Arts & Humanities Elective***		3	*Check for pre-requisites*
*Social Science Elective**		3	*Check for pre-requisites*
		6	
Third Semester			
CSE232	Advanced Java Programming	3	CSE231
EET227	PLC's and Industrial Controls I	3	EST130 **or** EET120
ENG221	Technical Report Writing	3	ENG124
MTH135	Precalculus^	5	(MTH093 and MTH094)♦♦ **or** Proficiency
		14	
Fourth Semester			
CSE236	Analyzing Software Requirements and Developing Solutions	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121
EET228	PLC's and Industrial Controls II	3	EET227
EET262	Pulse and Digital Integrated Circuits	4	CSE229 **or** CSE233
PHY121	Col Physics I with Algebra	4	MTH135 **or** (MTH125 and MTH130)
		14	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

▲ Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

5500

COMPUTER GRAPHIC ARTS

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT122	Graphic Arts Design	3		
IMT125	3D Graphics Modeling	3	IMT122	
IMT132	Digital Photography	3		
IMT244	Digital Page Layout and Design	3	IMT131 **and** IMT253	
IMT245	Graphic Arts Design II	3	IMT122	
IMT253	Graphics for Illustration	3	IMT122	
IMT254	Portfolio Development	3	IMT244 **and** IMT245	
IMT255	Advanced Illustration	3	IMT253	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD222	Advanced Cascading Style Sheets	3	WDD121	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO126	Science, Energy, & the Environment (lab)	4		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENT120	Entrepreneurship	3		
IMT121	Interactive Media	3		
IMT131	Color Theory and Design	3		
IMT137	Drawing Basics	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
ITD123	MAC Concepts	1		
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
SOC225	Cultural Diversity	3		
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER GRAPHIC ARTS

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
IMT122	Graphic Arts Design	3	
IMT131	Color Theory & Design	3	
IMT137	Drawing Basics	3	
ITD123	MAC Concepts	1	
		14	
Second Semester			
IMT121	Interactive Media	3	
IMT132	Digital Photography	3	
IMT245	Graphic Arts Design II	3	IMT122
IMT253	Graphics for Illustration	3	IMT122
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		15	
Summer Semester			
COM121	Effective Speaking	3	
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		6	
Third Semester			
BIO126	Science, Energy, & the Environment (lab)	4	
IMT125	3D Graphics Modeling	3	IMT122
IMT244	Digital Page Layout & Design	3	IMT131 **and** IMT253
IMT255	Advanced Illustration	3	IMT253
WDD121	Internet/Intranet Design & Development^	3	(IDS101 or Proficiency)
		16	**and** (ITD100 or Proficiency)
Fourth Semester			
ENT120	Entrepreneurship	3	
IMT254	Portfolio Development	3	IMT244 **and** IMT245
SOC225	Cultural Diversity	3	
WDD222	Advanced Cascading Style Sheets	3	WDD121
		12	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

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COMPUTER GRAPHIC ARTS – DIGITAL PHOTOGRAPHY MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT122	Graphic Arts Design	3		
IMT132	Digital Photography	3		
IMT244	Digital Page Layout and Design	3	IMT131 **and** IMT253	
IMT245	Graphic Arts Design II	3	IMT122	
IMT253	Graphics for Illustration	3	IMT122	
IMT256	Digital Imaging	3	IMT122 **and** IMT132	
IMT262	Advanced Digital Photography	3	IMT132	
IMT263	Photographic Lighting	3	IMT132	
IMT264	Image Management	3	IMT132 **and** IMT262	
DPH280	Photography Portfolio	3	IMT263	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO126	Science, Energy, & the Environment (lab)	4		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENT120	Entrepreneurship	3		
IMT121	Interactive Media	3		
IMT131	Color Theory and Design	3		
IMT137	Drawing Basics	3		
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
ITD123	MAC Concepts	1		
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
SOC225	Cultural Diversity	3		
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER GRAPHIC ARTS – DIGITAL PHOTOGRAPHY MAJOR

Effective Summer 2014

		Credit Hours	Pre- and Co-requisites
First Semester			
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
IMT122	Graphic Arts Design	3	
IMT132	Digital Photography	3	
ITD123	MAC Concepts	1	
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		14	
Second Semester			
IMT121	Interactive Media	3	
IMT131	Color Theory and Design	3	
IMT245	Graphic Arts Design II	3	IMT122
IMT253	Graphics for Illustration	3	IMT122
IMT263	Photographic Lighting	3	IMT132
		15	
Summer Semester			
COM121	Effective Speaking	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		6	
Third Semester			
BIO126	Science, Energy, & the Environment (lab)	4	
IMT137	Drawing Basics	3	
IMT244	Digital Page Layout and Design	3	IMT131 **and** IMT253
IMT262	Advanced Digital Photography	3	IMT132
		13	
Fourth Semester			
DPH280	Photography Portfolio	3	IMT263
ENT120	Entrepreneurship	3	
IMT256	Digital Imaging	3	IMT122 **and** IMT132
IMT264	Image Management	3	IMT132 **and** IMT262
SOC225	Cultural Diversity	3	
		15	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

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COMPUTER NETWORK ADMINISTRATION & SECURITY TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NET131	Microsoft Client Operating System	3	NET120 **and** NET121	
NET137	Routing and Switching Essentials	3	NET121	
NET220	UNIX/LINUX Operating Environment^	3	(MTH093 and MTH094)♦♦ **or** Proficiency	
NET244	Microsoft Networking I	3	NET120 **and** NET121	
NET245	Microsoft Networking II	3	NET244	
NET246	Microsoft Networking III	3	NET244	
NET264	UNIX/LINUX System Administration	3	NET220	
NET266	UNIX/LINUX Network Administration	3	NET220	
NET280	Web Server Administration	3	NET264 **or** NET266	
NET281	Firewall and Network Security	3	NET137	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
CFS129	Cryptography	3		
CFS136	Principles of Information Security	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **or** Proficiency	
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)♦♦ **o**r Proficiency **and** (IDS102 or Proficiency)	
	*Select one (1) Arts & Humanities or Social Science Elective from the list below***	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

****Arts & Humanities or Social Science Elective**: PSY121, PSY122, PSY123, PSY124, PSY221, PHL122, SOC121, SOC122, SOC123, SOC225, BUS122, BUS221, BUS222, PSC121

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER NETWORK ADMINISTRATION & SECURITY TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	3	
		13	
Second Semester			
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **or** Proficiency
NET131	Microsoft Client Operating System	3	NET120 **and** NET121
NET137	Routing and Switching Essentials	3	NET121
NET220	UNIX/LINUX Operating Environment^	3	(MTH093 and MTH094)♦♦ **or** Proficiency
NET244	Microsoft Networking I	3	NET120 **and** NET121
		16	
Third Semester			
CFS136	Principles of Information Security	3	
COM121	Effective Speaking	3	
		6	
Fourth Semester			
CFS136	Principles of Information Security	3	
NET245	Microsoft Networking II	3	NET244
NET266	UNIX/LINUX Network Administration	3	NET220
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)♦♦ **or** Proficiency
		13	**and** (IDS102 or Proficiency)
Fifth Semester			
NET246	Microsoft Networking III	3	NET244
NET264	UNIX/LINUX System Administration	3	NET220
NET280	Web Server Administration	3	NET264 **or** NET266
NET281	Firewall and Network Security	3	NET137
*Arts &Humanities or Social Science Elective***		3	*Check for pre-requisites*
		15	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

**Arts & Humanities or Social Science Elective: PSY121, PSY122, PSY123, PSY124, PSY221, PHL122, SOC121, SOC122, SOC123, SOC225, BUS122, BUS221, BUS222, PSC121

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

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COMPUTER NETWORK ADMINISTRATION & SECURITY TECHNOLOGY – UNIX/LINUX DATABASE ADMINISTRATION MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CFS275	Ethical Hacking	3	NET120 **and** NET220	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CPD122	Oracle Database: Introduction to SQL	3	CPD121	
CPD223	Oracle Database: Architecture & Administration	3	CPD122	
NET120	PC Upgrading and Maintenance	3		
NET131	Microsoft Client Operating System	3	NET120 **and** NET121	
NET220	UNIX/LINUX Operating Environment^	3	(MTH093 and MTH094)♦♦ **or** Proficiency	
NET264	UNIX/LINUX System Administration	3	NET220	
NET266	UNIX/LINUX Network Administration	3	NET220	
NET280	Web Server Administration	3	NET264 **or** NET266	
	Total	**30**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CFS129	Cryptography	3		
CFS136	Principles of Information Security	3		
COM121	Effective Speaking	3		
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **or** Proficiency	
NET121	Introduction to Computer Networking	3		
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)♦♦ **or** Proficiency **and** (IDS102 or Proficiency)	
	*Select one (1) Arts & Humanities or Social Science Elective from the list below***	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

**Arts & Humanities or Social Science Elective: PSY121, PSY122, PSY123, PSY124, PSY221, PHL122, SOC121, SOC122, SOC123, SOC225, BUS122, BUS221, BUS222, PSC121

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER NETWORK ADMINISTRATION & SECURITY TECHNOLOGY – UNIX/LINUX DATABASE ADMINISTRATION MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CFS129	Cryptography	3	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
NET120	PC Upgrading and Maintenance	3	
NET121	Intro to Computer Networking	3	
		13	
Second Semester			
CPD121	Data Modeling and Database Design ^	3	ITD100 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
NET131	Microsoft Client Operating System	3	NET120 **and** NET121
NET220	UNIX/LINUX Operating Environment^	3	(MTH093 and MTH094)♦♦ **or** Proficiency
		15	
Third Semester			
CFS136	Principles of Information Security	3	
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **and** (IDS102 or Proficiency)
		7	
Fourth Semester			
COM121	Effective Speaking	3	
CPD122	Oracle Database: Introduction to SQL	3	CPD121
CFS275	Ethical Hacking	3	NET120 and NET220
NET266	UNIX/LINUX Network Administration	3	NET220
		12	
Fifth Semester			
CPD223	Oracle Database: Architecture & Administration	3	CPD122
NET264	UNIX/LINUX System Administration	3	NET220
NET280	Web Server Administration	3	NET264 **or** NET266
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)♦♦ **or** Proficiency **and** (IDS102 or Proficiency)
*Arts & Humanities or Social Science Elective***		3	*Check for pre-requisites*
		16	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

**Arts & Humanities or Social Science Elective: PSY121, PSY122, PSY123, PSY124, PSY221, PHL122, SOC121, SOC122, SOC123, SOC225, BUS122, BUS221, BUS222, PSC121

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

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COMPUTER NETWORK ADMINISTRATION & SECURITY TECHNOLOGY – CISCO NETWORK ADMINISTRATION MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NET131	Microsoft Client Operating System	3	NET120 **and** NET121	
NET137	Routing and Switching Essentials	3	NET121	
NET220	UNIX/LINUX Operating Environment^	3	(MTH093 and MTH094)♦♦ **or** Proficiency	
NET244	Microsoft Networking I	3	NET120 **and** NET121	
NET251	Voice over IP Fundamentals	3	NET137	
NET253	Securing Networks with Switches and Routers	3	NET137	
NET254	Cisco Wireless	3	NET137	
NET256	Scaling Networks	3	NET137	
NET257	Connecting Networks	3	NET137	
NET281	Firewall and Network Security	3	NET137	
	Total	**30**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CFS129	Cryptography	3		
CFS136	Principles of Information Security	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **or** Proficiency	
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)♦♦ **or** Proficiency **and** (IDS102 or Proficiency)	
	*Select one (1) Arts & Humanities or Social Science Elective from the list below***	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^ Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

**Arts & Humanities or Social Science Elective: BUS122, BUS221, BUS222, PSC121, PHL122, PSY121, PSY122, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC225

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER NETWORK ADMINISTRATION & SECURITY TECHNOLOGY – CISCO NETWORK ADMINISTRATION MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CFS129	Cryptography	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	3	
		13	
Second Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
NET131	Microsoft Client Operating System	3	NET120 **and** NET121
NET137	Routing and Switching Essentials	3	NET121
NET220	UNIX/LINUX Operating Environment^	3	(MTH093 and MTH094)♦♦ **or** Proficiency
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **or** Proficiency
		16	
Third Semester			
CFS136	Principles of Information Security	3	
*Arts & Humanities or Social Science Elective***		3	*Check for pre-requisites*
		6	
Fourth Semester			
NET244	Microsoft Networking I	3	NET120 **and** NET121
NET251	Voice over IP Fundamentals	3	NET137
NET256	Scaling Networks	3	NET137
PHY101	Principles of Physics^ (lab)	4	(MTH093 and MTH094)♦♦ **or** Proficiency
		13	**and (**IDS102 or Proficiency)
Fifth Semester			
COM121	Effective Speaking	3	
NET253	Securing Networks with Switches and Routers	3	NET137
NET254	Cisco Wireless	3	NET137
NET257	Connecting Networks	3	NET137
NET281	Firewall and Network Security	3	NET137
		15	
	TOTAL CREDITS	**63**	

^ Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

**Arts & Humanities or Social Science Elective: BUS122, BUS221, BUS222, PSC121, PHL122, PSY121, PSY122, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC225

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

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COMPUTER PROGRAMMING AND DATABASE

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121	
CPD221	Oracle Database: PL/SQL Development▲	3	CPD122 **and** CSE122	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CPD223	Oracle Database: Architecture and Administration▲	3	CPD122	
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222	
CSE229	Visual Basic Development▲	3	CSE122	
CSE230	Advanced Visual Basic Development▲	3	CSE229	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
WDD226	Web Development with PHP and MySQL▲	3	CSE122 **and** WDD121	
WDD227	Advanced Web Development w/PHP and MySQL▲	3	WDD226	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency	
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CIS126	Fundamentals of Information Systems▲	3	(ITD105 and ITD106) **or** ITD122	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ or Proficiency	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Social Science Elective from the list below**	3	*Check for pre-requisites*	
	Total	**30**		
	TOTAL CREDIT HOURS	**60**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲ Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER PROGRAMMING AND DATABASE

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		12	
Second Semester			
CIS126	Fundamentals of Information Systems▲	3	(ITD105 and ITD106) **or** ITD122
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121
CSE229	Visual Basic Development▲	3	CSE122
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
WDD222	Advanced Cascading Style Sheets▲	3	WDD121
		12	
Summer Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
*Arts & Humanities Elective*****		3	*Check for pre-requisites*
		6	
Third Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
CPD222	Microsoft SQL Server Database▲	3	CPD121
CPD221	Oracle Database: PL/SQL Development▲	3	CPD122 **and** CSE122
CSE230	Advanced Visual Basic Development▲	3	CSE229
WDD226	Web Development with PHP and MySQL▲	3	CSE122 **and** WDD121
		15	
Fourth Semester			
CPD223	Oracle Database: Architecture and Admin▲	3	CPD122
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121
*Social Science Elective**		3	*Check for pre-requisites*
WDD227	Advanced Web Development with PHP and MySQL▲	3	WDD226
		15	
	TOTAL CREDITS	**60**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲ Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

5205

COMPUTER PROGRAMMING & DATABASE – GEOGRAPHIC INFORMATION SYSTEMS MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222	
CSE229	Visual Basic Development▲	3	CSE122	
CSE235	Python Development▲	3	CSE122	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
GIS123	Maps and Map Reading▲	3		
GIS231	Geographic Information Systems▲	3	GIS123	
GIS232	Remote Sensing and Digital Image Processing▲	3	GIS123	
GIS233	Advanced Tools in Geospatial Technologies▲	3	GIS231 **and** GIS232	
GIS234	Geospatial Technologies in Industry▲	3	GIS233	
	Total	**30**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ITD105	Computer Applications – Excel^	1	ITD100 **or** Proficiency	
ITD106	Computer Applications – Access^	1	ITD100 **or** Proficiency	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
DET125	Basic AutoCAD	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Natural Science Elective from the list below****	3-4	*Check for pre-requisites*	
	Total	**30**		
	TOTAL CREDIT HOURS	**60-61**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester
♦ Requires a 'B' or better.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
****Arts & Humanities Electives**: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122
*****Natural Science Electives**: BIO126, BIO128, BIO129, GEO141

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER PROGRAMMING & DATABASE GEOGRAPHIC INFORMATION SYSTEMS MAJOR

Effective Summer 2014

First Semester	Course Title	Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
GIS123	Maps and Map Reading	3	
WDD121	Internet/Intranet Design and Development	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		12	
Second Semester			
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE229	Visual Basic Development▲	3	CSE122
GIS231	Geographic Information Systems▲	3	GIS123
GIS232	Remote Sensing and Digital Imaging Processing▲	3	GIS123
*Natural Science Elective****		3-4	*Check for pre-requisites*
		15-16	
Summer Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		6	
Third Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ ENG124
CPD222	Microsoft SQL Server Database▲	3	CPD121
CSE235	Python Development▲	3	CSE122
DET125	Basic AutoCAD	3	
GIS233	Advanced Tools in Geospatial Technologies▲	3	GIS231 **and** GIS232
		15	
Fourth Semester			
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222
GIS234	Geospatial Technologies in Industry▲	3	GIS233
CSE236	Analyzing Software Requirements & Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121
*Arts & Humanities Elective***		3	*Check for pre-requisites*
		12	
	TOTAL CREDITS	**60-61**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

***Natural Science Electives: BIO126, BIO128, BIO129, GEO141

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

5204

DATABASE SYSTEMS (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222	
WDD226	Web Development with PHP and MYSQL▲	3	CSE122 **and** WDD121	
WDD227	Advanced Web Development with PHP and MYSQL▲	3	WDD226	
TECHNICAL ELECTIVE: ***Choose one (1) course below.***				
CPD225	Data Mining and Data Warehousing ▲	3	CPD121	
CIS221	Generating Reports for Decision Making ▲	3	CPD121	
	Total	**18**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	Total	**13**		
	TOTAL CREDIT HOURS	**31**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

DATABASE SYSTEMS (One-Year Certificate)

Effective Summer 2014

Summer Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		10	
First Semester			
CPD222	Microsoft SQL Server Database▲	3	CPD121
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
WDD226	Web Development with PHP and MYSQL▲	3	CSE122 **and** WDD121
		9	
Second Semester			
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222
WDD227	Advanced Web Development with PHP and MYSQL▲	3	WDD226
Technical Electives #		3	*Check for pre-requisites*
		12	
	TOTAL CREDITS	**31**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

#Technical Elective: CPD225 or CIS221

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

5250

COMPUTER SCIENCE AND ENGINEERING

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CSE229	Visual Basic Development▲	3	CSE122	
CSE230	Advanced Visual Basic Development▲	3	CSE229	
CSE231	Java Programming▲	3	CSE122	
CSE232	Advanced Java Programming▲	3	CSE231	
CSE233	C++ Programming▲	3	CSE122	
CSE234	Advanced C++ Programming▲	3	CSE233	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121	
WDD226	Web Development with PHP and MySQL▲	3	CSE122 **and** WDD121	
	Total	**30**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None None ENG124	
CIS126	Fundamentals of Information Systems▲	3	(ITD105 **and** ITD106) **or** ITD122	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals ^	3	ITD100 **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)♦♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Social Science Elective from the list below ****	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦♦Requires a 'C' or better.
▲ Course offerings vary by semester. Please see your academic advisor for availability.
*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221
**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER SCIENCE AND ENGINEERING

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		13	
Second Semester			
CIS126	Fundamentals of Information Systems▲	3	(ITD105 **and** ITD106) **or** ITD122
CSE229	Visual Basic Development▲	3	CSE122
CSE231	Java Programming▲	3	CSE122
CSE233	C++ Programming▲	3	CSE122
ENG124	College Composition^	3	ENG011 **or** Proficiency
		15	
Summer Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
*Social Science Elective**		3	*Check for pre-requisites*
		6	
Third Semester			
CPD222	Microsoft SQL Server Database▲	3	CPD121
CSE230	Advanced Visual Basic Development▲	3	CSE229
CSE232	Advanced Java Programming▲	3	CSE231
CSE234	Advanced C++ Programming▲	3	CSE233
WDD226	Web Development with PHP and MySQL▲	3	CSE122 **and** WDD121
		15	
Fourth Semester			
*Arts & Humanities Elective***		3	*Check for pre-requisites*
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 **or** CSE229 **or** CSE233 **or** CSE231 **or** WDD221 **or** CSE227 **or** WDD224 **or** WDD222 **or** WDD226) **and** CPD121
MTH135	Precalculus^	5	(MTH093 **and** MTH094)♦♦ **or** Proficiency
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121
		14	
	TOTAL CREDITS	**63**	

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦♦Requires a 'C' or better.
▲ Course offerings vary by semester. Please see your academic advisor for availability.
*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221
**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

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COMPUTER SCIENCE & ENGINEERING – MOBILE APPLICATION DEVELOPMENT MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE221	Android Development 1▲	3	CSE231 **and** CSE121	
CSE222	iOS Development 1▲	3	CSE121	
CSE223	iOS Development 2▲	3	CSE222	
CSE224	Android Development 2▲	3	CSE221	
CSE225	Cross-Platform Mobile Application Development▲	3	WDD222 **and** WDD221 **and** CSE221 **and** CSE222	
CSE226	Software Engineering For Handheld Devices▲	3	CSE231	
CSE231	Java Programming▲	3	CSE122	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
WDD221	Web Development with JavaScript and Ajax▲	3	WDD121	
WDD222	Advanced Cascading Style Sheets▲	3	WDD121	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE121	Mobile Development Architecture▲	3	Co-CSE122	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals ^	3	ITD100 **or** Proficiency	
ITD123	Mac Concepts	1		
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Social Science Elective from the list below**	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.
^^To promote, student success, this course should be taken in the first semester.
♦♦Requires a 'C' or better.
▲Course offerings vary by semester. Please see your academic advisor for availability.
*Social Science Elective: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221
**Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER SCIENCE & ENGINEERING – MOBILE APPLICATION DEVELOPMENT MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ITD123	Mac Concepts	1	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE121	Mobile Development Architecture	3	CSE122
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		14	
Second Semester			
CSE231	Java Programming▲	3	CSE122
MTH125	College Algebra^	4	(MTH093 **and** MTH094)♦♦ **or** Proficiency
WDD222	Advanced Cascading Style Sheets▲	3	WDD121
WDD221	Web Development with JavaScript and Ajax▲	3	WDD121
		13	
Summer Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
*Social Science Elective**		3	*Check for pre-requisites*
		6	
Third Semester			
*Arts & Humanities Elective***		3	*Check for pre-requisites*
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
CSE221	Android Development 1▲	3	CSE231 **and** CSE121
CSE222	iOS Development 1▲	3	CSE121
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		15	
Fourth Semester			
CSE223	iOS Development 2▲	3	CSE222
CSE224	Android Development 2▲	3	CSE221
CSE225	Cross-Platform Mobile Application Development▲	3	WDD222 **and** WDD221 **and** CSE221**and** CSE222
CSE226	Software Engineering for Hand-Held Devices▲	3	CSE231
CSE236	Analyzing Software Requirements & Developing Solutions▲	3	(CIS221 **or** CSE229 **or** CSE233 **or** CSE231 **or** WDD221 **or** CSE227 **or** WDD224 **or** WDD222 **or** WDD226) **and** CPD121
		15	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.
^^To promote, student success, this course should be taken in the first semester.
♦♦Requires a 'C' or better.
▲Course offerings vary by semester. Please see your academic advisor for availability.
*Social Science Elective: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221
**Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

5253

COMPUTER SCIENCE & ENGINEERING

VIDEO GAME DESIGN AND DEVELOPMENT MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE227	Windows Programming with C#▲	3	CSE122	
CSE231	Java Programming▲	3	CSE122	
CSE232	Advanced Java Programming▲	3	CSE231	
CSE233	C++ Programming▲	3	CSE122	
CSE234	Advanced C++ Programming▲	3	CSE233	
WDD230	Advanced Flash Animation and Design▲	3	WDD124	
WDD231	Flash Actionscripting▲	3	WDD124	
SGE221	Advanced Gaming and Simulation Topics▲	3	CSE234	
SGE222	3D Game Design and Development▲	3	SGE223	
SGE223	2D Game Design and Development▲	3	CSE233	
	Total	**30**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CSE121	Mobile Development Architecture▲	3	Co-CSE122	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 **or** Proficiency) **and** (ITD100 **or** Proficiency)	
SGE121	Game Design^	3	IDS102 or Proficiency	
ENG124	College Composition^	3	ENG011 or Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)♦♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 **or** Proficiency) **and** (ITD100 **or** Proficiency)	
WDD124	Flash Animation and Design▲	3	WDD121	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Social Science Elective from the list below*****	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦♦Requires a 'C' or better.
▲Course offerings vary by semester. Please see your academic advisor for availability.
*Social Science Electives: PSC121, PSY121, PSY122, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225
**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER SCIENCE & ENGINEERING

VIDEO GAME DESIGN AND DEVELOPMENT MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CSE121	Mobile Development Architecture▲	3	Co-CSE122
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
SGE121	Game Design^	3	IDS102 **or** Proficiency
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		13	
Second Semester			
CSE231	Java Programming▲	3	CSE122
CSE233	C++ Programming▲	3	CSE122
ENG124	College Composition^	3	ENG011 **or** Proficiency
WDD124	Flash Animation and Design▲	3	WDD121
		12	
Summer Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
*Social Science Elective**		3	*Check for pre-requisites*
		6	
Third Semester			
CSE227	Windows Programming with C#▲	3	CSE122
CSE232	Advanced Java Programming▲	3	CSE231
CSE234	Advanced C++ Programming▲	3	CSE233
SGE223	2D Game Design and Development▲	3	CSE233
WDD230	Advanced Flash Animation and Design▲	3	WDD124
		15	
Fourth Semester			
*Arts & Humanities Elective***		3	*Check for pre-requisites*
SGE221	Advanced Gaming and Simulation Topics▲	3	CSE234
SGE222	3D Game Design and Development▲	3	SGE223
MTH135	Precalculus^	5	(MTH093 and MTH094)♦♦ **or** Proficiency
WDD231	Flash Actionscripting▲	3	WDD124
		17	
	TOTAL CREDITS	**63**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦♦Requires a 'C' or better.

▲Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, PSY122, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

5450

CYBER SECURITY AND COMPUTER FORENSICS

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CFS136	Principles of Information Security	3		
CFS137	Computer Crime and Investigation	3	NET120	
CFS256	Disaster Recovery and Incident Planning	3		
CFS257	File Systems Analysis	3	CFS137	
CFS258	Cyber Forensics & Data Recovery	3	CFS257	
CFS275	Ethical Hacking	3	NET120 **and** NET220	
CFS287	Network Forensics	3	CFS137 **and** NET121 **and** NET220	
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
NET220	UNIX/LINUX Operating Environment^	3	(MTH093 and MTH094)♦♦ **or** Proficiency	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC235	Forensic Accounting	3		
BIO126	Science, Energy, & the Environment (lab)	4		
CFS129	Cryptography	3		
CFS140	Biometric Applications	3		
CFS175	White Collar Crime	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **or** Proficiency	
SOC225	Cultural Diversity	3		
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
♦♦Requires a 'C' or better.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

CYBER SECURITY & COMPUTER FORENSICS

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CFS136	Principles of Information Security	3	
COM121	Effective Speaking	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	3	
		16	
Second Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
CFS137	Computer Crime and Investigation	3	NET120
CFS140	Biometric Applications	3	
NET220	UNIX/LINUX Operating Environment^	3	(MTH093 and MTH094)♦♦ or Proficiency
CFS175	White Collar Crime	3	
		15	
Third Semester			
CFS129	Cryptography	3	
SOC225	Cultural Diversity	3	
		6	
Fourth Semester			
BIO126	Science, Energy, & the Environment (lab)	4	
MTH125	College Algebra^	4	(MTH093 and MTH094)♦♦ **or** Proficiency
CFS257	File Systems Analysis	3	CFS 137
CFS275	Ethical Hacking	3	NET120 **and** NET220
		14	
Fifth Semester			
ACC235	Forensic Accounting	3	
CFS256	Disaster Recovery & Incident Planning	3	
CFS258	Cyber Forensics & Data Recovery	3	CFS257
CFS287	Network Forensics	3	CFS137 **and** NET121 **and** NET220
		12	
	TOTAL CREDITS	**63**	

^Based upon SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
♦♦Requires a 'C' or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

5550

DIGITAL VIDEO MEDIA TECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT125	3D Graphics Modeling	3	IMT122	
IMT129	Digital Audio Recording and Editing	3		
IMT223	Digital Video Recording and Editing	3	IMT121	
IMT237	Compositing	3	IMT223 **or** IMT125	
IMT238	Advanced Video Production	3	IMT242	
IMT242	Lighting and Cinematography	3	IMT223	
IMT251	Authoring and Video Compression	3	IMT242	
IMT265	Motion Graphics Portfolio	3	IMT268	
IMT266	Film Theory and Practice	3	IMT121	
IMT268	Advanced Video Editing	3	IMT223	
	Total	**30**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO126	Science, Energy, & the Environment (lab)	4		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENT120	Entrepreneurship	3		
IMT121	Interactive Media	3		
IMT122	Graphic Arts Design	3		
IMT132	Digital Photography	3		
IMT137	Drawing Basics	3		
ITD123	MAC Concepts	1		
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
	*Select one (1) Arts & Humanities Elective from the list below***	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

****Arts & Humanities Elective**: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

DIGITAL VIDEO MEDIA TECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
IMT121	Interactive Media	3	
IMT122	Graphic Arts Design	3	
IMT137	Drawing Basics	3	
		13	
Second Semester			
IMT129	Digital Audio Recording and Editing	3	
IMT132	Digital Photography	3	
IMT223	Digital Video Recording and Editing	3	IMT121
IMT266	Film Theory and Practice	3	IMT121
ITD123	MAC Concepts	1	
		13	
Summer Semester			
COM121	Effective Speaking	3	
MTH106	Math for Technology^ Ω	3	(MTH091 **and** MTH092)♦ **or** Proficiency
BIO126	Science, Energy, & the Environment (lab)	4	
		10	
Third Semester			
ENT120	Entrepreneurship	3	
IMT125	3D Graphics Modeling	3	IMT122
IMT237	Compositing	3	IMT223 **or** IMT125
IMT242	Lighting and Cinematography	3	IMT223
IMT268	Advanced Video Editing	3	IMT223
		15	
Fourth Semester			
IMT238	Advanced Video Production	3	IMT242
IMT251	Authoring and Video Compression	3	IMT242
IMT265	Motion Graphics Portfolio	3	IMT268
*Arts & Humanities Elective***		3	*Check for pre-requisites*
		12	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

****Arts & Humanities Elective**: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

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HOMELAND SECURITY INFORMATION TECHNOLOGY

(National Security Preparedness, Response, and Operations)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CFS137	Computer Crime and Investigation	3	NET120	
CFS256	Disaster Recovery and Incident Planning	3		
CFS257	File System Analysis	3	CFS137	
CFS275	Ethical Hacking	3	NET120 **and** NET220	
HLS121	Introduction to Emergency Management	3		
HLS122	Intelligence and Homeland Security	3		
HLS123	Homeland Defense and Crisis Management	3		
HLS220	Weapons of Mass Destruction Awareness	3	HLS123	
HLS221	Terrorism and Homeland Defense	3	HLS122	
HLS225	Intelligence Analysis	3		
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO126	Science, Energy, & the Environment (lab)	4		
CFS140	Biometric Applications	3		
CFS136	Principles of Information Security	3		
CFS175	White Collar Crime	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
NET120	PC Upgrading and Maintenance	3		
NET220	UNIX/LINUX Operating System^	3	(MTH093 and MTH094)♦♦ **or** Proficiency	
SOC225	Cultural Diversity	3		
	Total	**32**		
	TOTAL CREDIT HOURS	**62**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

♦♦Requires a 'C' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

HOMELAND SECURITY INFORMATION TECHNOLOGY

(National Security Preparedness, Response, and Operations)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
HLS121	Introduction to Emergency Management	3	
HLS122	Intelligence and Homeland Security	3	
HLS123	Homeland Defense and Crisis Management	3	
NET120	PC Upgrading and Maintenance	3	
		13	
Second Semester			
CFS136	Principles of Information Security	3	
CFS137	Computer Crime and Investigation	3	NET120
CFS140	Biometric Applications	3	
NET220	UNIX/LINIX Operating Systems^	3	(MTH093 and MTH094)♦♦ **or** Proficiency
HLS220	Weapons of Mass Destruction Awareness	3	HLS123
		15	
Third Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
BIO126	Science, Energy, & the Environment (lab)	4	
		7	
Fourth Semester			
CFS256	Disaster Recovery and Incident Planning	3	
CFS257	File Systems Analysis	3	CFS137
CFS275	Ethical Hacking	3	NET120 **and** NET220
HLS225	Intelligence Analysis	3	
MTH106	Math for Technology^ Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		15	
Fifth Semester			
CFS175	White Collar Crime	3	
COM121	Effective Speaking	3	
HLS221	Terrorism and Homeland Defense	3	HLS122
SOC225	Culture Diversity	3	
		12	
	TOTAL CREDITS	**62**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

♦♦Requires a 'C' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

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JUDICIAL REPORTING & CAPTIONING – BROADCAST CAPTIONING MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IRT121	Realtime Theory I	4		
IRT122	Realtime Theory II	4	IRT121	
IRT129	Speed Building I	4	IRT122	
IRT130	Speed Building II	4	IRT129	
IRT123	Speed Building III	4	IRT130	
IRT232	JRC Internship▲	2	*Department Chair approval.*	
IRT230	Basic Broadcast Captioning▲	3	IRT122	
IRT235	Advanced Broadcast Captioning▲	3	IRT230	
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133	
IRT240	Short Writing Techniques	3	IRT122	
IRT TECHNICAL ELECTIVE: Choose one (1) from below.				
IRT131	Legal Terminology	3		
BIO127	Human Biology	4		
CHM101	Introduction to Chemistry^+	4	MTH123 **or** Proficiency	
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
HIS121	U.S. History I – to 1877	3		
ASL121	Introduction to the Deaf Culture & Community	3		
	Total	**37-38**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
ACC130	Business Law and Ethics	3		
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG230	Business Communication	3	ENG124	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
AOT130	Editing, Proofreading & Language Skills	3		
PSY121 **or** SOC1212	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
NON-TECHNICAL ELECTIVE: *Choose one (1) course below.*				
PSC121	Political Science	3		
BIO125	Medical Terminology	3		
COM121	Effective Speaking	3		
	Total	**32**		
	TOTAL CREDIT HOURS	**69-70**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Software/Machine
A computerized stenograph machine and Case Catalyst student version must be purchased prior to beginning this program. Please contact an academic advisor in the JRC program for more information.

JUDICIAL REPORTING & CAPTIONING – BROADCAST CAPTIONING MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
AOT130	Editing, Proofreading & Language Skills	3	
IRT121	Realtime Theory I	4	
		14	
Second Semester			
ENG230	Business Communication	3	ENG124
ACC130	Business Law & Ethics	3	
IRT Technical Elective#		3-4	
IRT122	Realtime Theory II	4	IRT121
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133
		16-17	
Summer Semester			
IRT129	Speed Building I	4	IRT122
IRT240	Short Writing Techniques	3	IRT122
		7	
Third Semester			
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
BUS121	Business Administration^	4	IDS102 **or** Proficiency
*Non-Technical Elective****		3	
IRT230	Basic Broadcast Captioning▲	3	IRT122
IRT130	Speed Building II	4	IRT129
		17	
Fourth Semester			
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
IRT123	Speed Building III	4	IRT130
IRT235	Advanced Broadcast Captioning▲	3	IRT230
IRT232	JRC Internship▲	2	*Department Chair approval.*
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
		15	
	TOTAL CREDITS	**69-70**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦Requires a 'B' or better.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
#Technical Elective: IRT131, BIO127, CHM101, ENT120, HIS121, ASL121
***Non-Technical Elective: PSC121, BIO125, COM121

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

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JUDICIAL REPORTING & CAPTIONING – JUDICIAL REPORTING MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IRT121	Realtime Theory I	4		
IRT122	Realtime Theory II	4	IRT121	
IRT129	Speed Building I	4	IRT122	
IRT130	Speed Building II	4	IRT129	
IRT123	Speed Building III	4	IRT130	
IRT232	JRC Internship▲	2	*Department Chair approval.*	
IRT131	Legal Terminology	3		
IRT231	Judicial Procedures▲	3	IRT229 **and** (IRT122 or IRT133)	
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133	
IRT240	Short Writing Techniques	3	IRT122	
IRT241	RPR Written Knowledge Preparation *(8 wks)*▲	1	IRT231	
TECHNICAL ELECTIVE: ***Choose one (1) IRT course below.***				
IRT230	Basic Broadcast Captioning▲	3	IRT122	
IRT233	Transcription and Editing for Scopists▲	3	IRT229 **and** IRT231 **and** (IRT122 or IRT133)	
BIO125	Medical Terminology	3		
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
	Total	**38**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
ACC130	Business Law and Ethics	3		
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG230	Business Communication	3	ENG124	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
AOT130	Editing, Proofreading & Language Skills	3		
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
NON-TECHNICAL ELECTIVE: ***Choose one (1) course below***				
PSC121	Political Science	3		
BIO125	Medical Terminology	3		
COM121	Effective Speaking	3		
	Total	**32**		
	TOTAL CREDIT HOURS	**70**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Software/Machine
A computerized stenograph machine and Case Catalyst student version must be purchased prior to beginning this program. Please contact an academic advisor in the JRC program for more information.

JUDICIAL REPORTING & CAPTIONING – JUDICIAL REPORTING MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
AOT130	Editing, Proofreading & Language Skills	3	
IRT121	Realtime Theory I	4	
		14	
Second Semester			
ENG230	Business Communication	3	ENG124
ACC130	Business Law & Ethics	3	
IRT131	Legal Terminology	3	
IRT122	Realtime Theory II	4	IRT121
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133
		16	
Summer Semester			
IRT129	Speed Building I	4	IRT122
IRT240	Short Writing Techniques	3	IRT122
		7	
Third Semester			
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
BUS121	Business Administration^	4	IDS102 **or** Proficiency
*Non-Technical Elective****		3	
IRT231	Judicial Procedures▲	3	IRT229 **and** (IRT122 or IRT133)
IRT130	Speed Building II	4	IRT129
		17	
Fourth Semester			
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092) ♦ **or** Proficiency
IRT123	Speed Building III	4	IRT130
IRT232	JRC Internship▲	2	*Department Chair approval.*
IRT241	RPR Written Knowledge Preparation *(8 weeks)*▲	1	IRT231
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
IRT Technical Elective#		3	
		16	
	TOTAL CREDITS	**70**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
♦Requires a 'B' or better.
#Technical Elective: IRT230, IRT233, BIO125, ENT120
***Non-Technical Elective: PSC121, BIO125, COM121

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

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JUDICIAL REPORTING & CAPTIONING – REALTIME TRANSCRIPTION MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IRT121	Realtime Theory I	4		
IRT122	Realtime Theory II	4	IRT121	
IRT129	Speed Building I	4	IRT122	
IRT130	Speed Building II	4	IRT129	
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133	
IRT240	Short Writing Techniques	3	IRT122	
IRT TECHNICAL ELECTIVE: ***Choose 3 courses below.***				
IRT123	Speed Building III	4	IRT130	
IRT131	Legal Terminology	3		
IRT231	Judicial Procedures▲	3	IRT229 **and** (IRT121 or IRT133)	
IRT230	Basic Broadcast Captioning▲	3	IRT122	
IRT235	Advanced Broadcast Captioning ▲	3	IRT230	
AOT121	Keyboarding/Formatting	3		
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)	
AOT239	Legal Transcription▲	3	AOT130 **and** Co-AOT129	
MTC121	Medical Transcription Terminology I	5	BIO123 **and** BIO125 **and** AOT121	
BIO123	Principles of Human Structure and Function (lab)#	5	BIO101 **or** BIO127	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
	Total	**31-33**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
ACC130	Business Law and Ethics	3		
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG230	Business Communication	3	ENG124	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
AOT130	Editing, Proofreading & Language Skills	3		
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
NON-TECHNICAL ELECTIVE: ***Choose one (1) course below.***				
PSC121	Political Science	3		
BIO125	Medical Terminology	3		
COM121	Effective Speaking	3		
	Total	**32**		
	TOTAL CREDIT HOURS	**63-65**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

#BIO121 and BIO122 may be substituted for BIO123.

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Software/Machine
A computerized stenograph machine and Case Catalyst student version must be purchased prior to beginning this program. Please contact an academic advisor in the JRC program for more information.

JUDICIAL REPORTING & CAPTIONING – REALTIME TRANSCRIPTION MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
AOT130	Editing, Proofreading & Language Skills	3	
IRT121	Realtime Theory I	4	
		14	
Second Semester			
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
*Non-Technical Elective****		3	
IRT122	Realtime Theory II	4	IRT121
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133
		16	
Summer Semester			
IRT129	Speed Building I	4	IRT122
IRT240	Short Writing Techniques	3	IRT122
		7	
Third Semester			
ENG230	Business Communication	3	ENG124
BUS121	Business Administration^	4	IDS102 **or** Proficiency
IRT Technical Elective#		3	
IRT130	Speed Building II	4	IRT129
		14	
Fourth Semester			
ACC130	Business Law and Ethics	3	
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
IRT Technical Elective#		3	
IRT Technical Elective#		3-5	
		12-14	
	TOTAL CREDITS	**63-65**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦Requires a 'B' or better.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
#IRT Technical Electives: IRT123, IRT131, IRT231, IRT230, IRT235, AOT121, AOT127, AOT239, MTC121, BIO123, BIO124
***Non-Technical Elective: PSC121, BIO125, COM121

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

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JUDICIAL REPORTING & CAPTIONING – SCOPIST MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IRT133	Theory for Scopists	3		
IRT233	Transcription and Editing for Scopists▲	3	IRT229 **and** IRT231 **and** (IRT133 or IRT122)	
AOT130	Editing, Proofreading & Language Skills	3		
IRT131	Legal Terminology	3		
IRT231	Judicial Procedures▲	3	IRT229 **and** (IRT122 or IRT133)	
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133	
BIO125	Medical Terminology	3		
AOT121	Keyboarding/Formatting	3		
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
IRT TECHNICAL ELECTIVE: ***Choose one (1) course below.***				
IRT129	Speed Building I	4	IRT122	
IMT122	Graphic Arts Design	3		
ENT221	Entrepreneurial Finance	3	ENT120	
	Total	**30-31**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
ACC130	Business Law and Ethics	3		
ACC121	Principles of Accounting	4		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG230	Business Communication	3	ENG124	
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
ENT121	Entrepreneurial Marketing	3	ENT120	
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
NON-TECHNICAL ELECTIVE: ***Choose one (1) course below.***				
PSC121	Political Science	3		
COM121	Effective Speaking	3		
	Total	**36**		
	TOTAL CREDIT HOURS	**66-67**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Software
Case Catalyst student version must be purchased for this program. Please contact an academic advisor in the JRC program for more information.

JUDICIAL REPORTING & CAPTIONING – SCOPIST MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
AOT130	Editing, Proofreading & Language Skills	3	
AOT121	Keyboarding/Formatting	3	
IRT131	Legal Terminology	3	
IRT133	Theory for Scopists	3	
		16	
Second Semester			
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
BIO125	Medical Terminology	3	
ENG230	Business Communication	3	ENG124
ACC130	Business Law and Ethics	3	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133
		18	
Third Semester			
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency
BUS121	Business Administration^	4	IDS102 **or** Proficiency
*Non-Technical Elective****		3	
IRT231	Judicial Procedures▲	3	IRT229 **and** (IRT122 **or** IRT133)
ENT120	Entrepreneurship^	3	IDS102 **or** Proficiency
		16	
Fourth Semester			
ENT121	Entrepreneurial Marketing	3	ENT120
ACC121	Principles of Accounting	4	
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
IRT Technical Elective#		3-4	
IRT233	Transcription and Editing for Scopists▲	3	IRT229 **and** IRT231 **and** (IRT133 or IRT122)
		16-17	
	TOTAL CREDITS	**66-67**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦Requires a 'B' or better.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
#IRT Technical Elective: IRT129, IMT122, ENT221
***Non-Technical Elective: PSC121 or COM121

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

2105

LEGAL ASSISTING

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting	3		
AOT129	Keyboarding Skill Building	1	AOT121	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
AOT239	Legal Transcription▲	3	AOT130 **and** Co-AOT129	
AOT224	Legal Office Procedures	3	AOT121 **and** AOT130	
IRT131	Legal Terminology	3		
AOT235	Legal Research and Writing	3		
AOT237	Legal Office Applications	3	AOT239 **and** (AOT224 or PLS121)	
AOT130	Editing, Proofreading & Language Skills	3		
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)	
AOT226	Spreadsheet Microsoft Excel^▲	3	ITD100 **or** Proficiency	
AOT132	Records Management^	3	IDS102 **or** Proficiency	
	Total	**34**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
ACC121	Principles of Accounting	4		
AOT232	AOT Practicum+++▲	2	AOT227 **or** AOT237	
BUS121	Business Administration^	4	IDS102 **or** Proficiency	
MTH108	Explorations in Modern Mathematics^ Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
ACC130	Business Law and Ethics	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOC225	Cultural Diversity	3		
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
ITD108	Microsoft Outlook^	1	IDS102 **or** Proficiency	
	Total	**30**		
	TOTAL CREDIT HOURS	**64**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
+++Legal Assisting should complete AOT237; AOP students should take AOT227
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

LEGAL ASSISTING

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
AOT130	Editing, Proofreading & Language Skills	3	
AOT121	Keyboarding/Formatting	3	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
BUS121	Business Administration^	4	IDS102 **or** Proficiency
IRT131	Legal Terminology	3	
		20	
Second Semester			
AOT127	Word Processing Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)
AOT129	Keyboarding Skill Building	1	AOT121
AOT239	Legal Transcription▲	3	AOT130 **and** Co-AOT129
AOT224	Legal Office Procedures	3	AOT121 **and** AOT130
AOT132	Records Management^	3	IDS102 **or** Proficiency
MTH108	Explorations in Modern Mathematics^ Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		16	
Third Semester			
AOT226	Spreadsheets Microsoft Excel^▲	3	ITD100 **or** Proficiency
AOT237	Legal Office Applications	3	AOT239 **and** (AOT224 or PLS121)
ACC130	Business Law and Ethics	3	
SOC225	Cultural Diversity	3	
ACC121	Principles of Accounting	4	
		16	
Fourth Semester			
COM121	Effective Speaking	3	
AOT232	AOT Practicum+++▲	2	AOT227 **or** AOT237
AOT235	Legal Research and Writing	3	
PSY121 **or** SOC121	General Psychology^ **or** Sociology^	3	IDS102 **or** Proficiency
ITD108	Microsoft Outlook^	1	IDS102 **or** Proficiency
		12	
	TOTAL CREDITS	**64**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
+++Legal Assisting should complete AOT237; AOP students should take AOT227
▲Course offerings vary by semester. Please see your academic advisor for availability.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

2106

LEGAL ASSISTING (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting	3		
AOT129	Keyboarding Skill Building	1	AOT121	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency	
AOT239	Legal Transcription▲	3	AOT130 **and** Co-AOT129	
AOT224	Legal Office Procedures	3	AOT121 **and** AOT130	
IRT131	Legal Terminology	3		
AOT237	Legal Office Applications	3	AOT239 **and** (AOT224 or PLS121)	
AOT130	Editing, Proofreading & Language Skills	3		
	Total	**22**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
MTH108	Explorations in Modern Mathematics^Ω	3	(MTH091 **and** MTH092)♦ or Proficiency	
ACC130	Business Law and Ethics	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOC225	Cultural Diversity	3		
	Total	**13**		
	TOTAL CREDIT HOURS	**35**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

LEGAL ASSISTING (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
AOT121	Keyboarding/Formatting	3	
AOT130	Editing, Proofreading & Language Skills	3	
ITD122	Computer Applications for Professionals^++	3	ITD100 **or** Proficiency
IRT131	Legal Terminology	3	
		16	
Second Semester			
AOT224	Legal Office Procedures	3	AOT121 **and** AOT130
AOT129	Keyboarding Skill Building	1	AOT121
SOC225	Cultural Diversity	3	
MTH108	Explorations in Modern Mathematics^ Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
AOT239	Legal Transcription▲	3	AOT130 **and** Co-AOT129
		13	
Third Semester			
AOT237	Legal Office Applications	3	AOT239 **and** (AOT224 or PLS121)
ACC130	Business Law and Ethics	3	
		6	
	TOTAL CREDITS	**35**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

++Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

5000

MANAGEMENT INFORMATION SYSTEMS

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS124	ITIL Foundations▲	3	ITD122 **or** (ITD105 and ITD106)	
CIS125	Data Analysis and Decision Making▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121	
CIS221	Generating Reports for Decision Making▲	3	CPD121	
CIS222	Data Acquisition and Analysis▲	3	CPD121	
CIS223	IT Project Management▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121	
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222	
CPD225	Data Mining and Data Warehousing▲	3	CPD121	
CSE236	Analyzing Software Requirements & Developing Solutions▲	3	(CIS221 **or** CSE229 **or** CSE233 **or** CSE231 **or** WDD221 **or** CSE227 **or** WDD224 or WDD222 **or** WDD226) **and** CPD121	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CIS126	Fundamentals of Information Systems▲	3	ITD122 **or** (ITD105 and ITD106)	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and (**ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD105	Computer Applications – Excel^	1	ITD100 **or** Proficiency	
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Social Science Elective from the list below**	3	*Check for pre-requisites*	
	Total	**30**		
	TOTAL CREDIT HOURS	**60**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MANAGEMENT INFORMATION SYSTEMS

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		12	
Second Semester			
CIS126	Fundamentals of Information Systems▲	3	ITD122 **or** (ITD105 and ITD106)
CIS223	IT Project Management▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121
ENG124	College Composition^	**3**	ENG011 **or** Proficiency
MTH106	Math for Technology^ Ω	3	(MTH091 or MTH092)♦ **or** Proficiency)
		15	
Summer Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
*Social Science Elective**		3	*Check for pre-requisites*
		6	
Third Semester			
CIS124	ITIL Foundations▲	3	ITD122 **or** (ITD105 and ITD106)
CIS125	Data Analysis and Decision Making▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121
CIS221	Generating Reports for Decision Making▲	3	CPD121
CPD222	Microsoft SQL Server Database▲	3	CPD121
CPD225	Data Mining and Data Warehousing▲	3	CPD121
		15	
Fourth Semester			
CIS222	Data Acquisition and Analysis▲	3	CPD121
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121
*Arts & Humanities Elective***		3	*Check for pre-requisites*
		12	
	TOTAL CREDITS	**60**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

5011

MANAGEMENT INFORMATION SYSTEMS

HELP DESK/COMPUTER SUPPORT SPECIALIST MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS121	Help Desk and Computer Support Concepts^▲	3	IDS102 **or** Proficiency	
CIS124	ITIL Foundations▲	3	ITD122 **or** (ITD105 and ITD106)	
CIS221	Generating Reports for Decision Making▲	3	CPD121	
CIS223	IT Project Management▲	3	ITD122 **or** (ITD105 and ITD106)) **and** CPD121	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CPD225	Data Mining and Data Warehousing▲	3	CPD121	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
NET244	Microsoft Networking I	3	NET120 **and** NET121	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CIS126	Fundamentals of Information Systems▲	3	ITD122 **or** (ITD105 and ITD106)	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency	
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency	
ITD123	MAC Concepts	1		
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	Select one (1) Arts & Humanities Elective from the list below ****	3	*Check for pre-requisites*	
	Select one (1) Social Science Elective from the list below *	3	*Check for pre-requisites*	
	Total	**31**		
	TOTAL CREDIT HOURS	**61**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221
**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MANAGEMENT INFORMATION SYSTEMS – HELP DESK/COMPUTER SUPPORT SPECIALIST MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CIS121	Help Desk and Computer Support Concepts^▲	3	IDS102 **or** Proficiency
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 **or** Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency)
		15	**and** (ITD100 or Proficiency)
Second Semester			
CIS126	Fundamentals of Information Systems▲	3	ITD122 **or** (ITD105 and ITD106)
CIS223	IT Project Management▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121
ITD123	MAC Concepts	1	
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	3	
		13	
Summer Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦
		6	**or** Proficiency
Third Semester			
CIS124	ITIL Foundations▲	3	ITD122 **or** (ITD105 and ITD106)
CIS221	Generating Reports for Decision Making▲	3	CPD121
CPD222	Microsoft SQL Server Database▲	3	CPD121
CPD225	Data Mining and Data Warehousing▲	3	CPD121
NET244	Microsoft Networking I	3	NET120 **and** NET121
		15	
Fourth Semester			
*Arts & Humanities Elective***		3	*Check for pre-requisites*
*Social Science Elective**		3	*Check for pre-requisites*
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 **or** CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121
		12	
	TOTAL CREDITS	**61**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

5012

MANAGEMENT INFORMATION SYSTEMS – MEDICAL INFORMATICS MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS124	ITIL Foundations▲	3	ITD122 **or** (ITD105 and ITD106)	
CIS125	Data Analysis and Decision Making▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121	
CIS221	Generating Reports for Decision Making▲	3	CPD121	
CIS222	Data Acquisition and Analysis▲	3	CPD121	
CIS223	IT Project Management▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121	
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
HIT123	Healthcare Legal and Ethical Issues	2	HIT230 **or** Co-HIT121+	
HIT229	Health Information Systems and Technology	3	(HIT224 and ITD122) **or** CIS126	
HIT230	Healthcare Delivery in the U.S.	2		
	Total	**31**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CIS126	Fundamentals of Information Systems▲	3	ITD122 **or** (ITD105 and ITD106)	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency	
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development ^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	*Select one (1) Arts & Humanities Elective from the list below***	3	*Check for pre-requisites*	
	*Select one (1) Social Sciences Elective from the list below**	3	*Check for pre-requisites*	
	Total	**30**		
	TOTAL CREDIT HOURS	**61**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

+ Students in the Medical Informatics Major are required to take HIT230, HIT121 is required for Health Information Management Students only.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲ Course offerings vary by semester. Please see your academic advisor for availability.

*Social Sciences Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MANAGEMENT INFORMATION SYSTEMS - MEDICAL INFORMATICS MAJOR

Effective Summer 2014

First Semester	Course Title	Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
HIT230	Healthcare Delivery in the U.S.	2	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		12	
Second Semester			
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121
CIS126	Fundamentals of Information Systems▲	3	ITD122 **or** (ITD105 and ITD106)
HIT123	Healthcare Legal and Ethical Issues	2	HIT230 **or** Co-HIT121+
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
		13	
Summer Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
*Arts & Humanities Elective***		3	*Check for pre-requisites*
		6	
Third Semester			
CIS124	ITIL Foundations▲	3	ITD122 **or** (ITD105 and ITD106)
CIS125	Data Analysis and Decision Making▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121
CIS221	Generating Reports for Decision Making▲	3	CPD121
CPD222	Microsoft SQL Server Database▲	3	CPD121
*Social Sciences Elective**		3	*Check for pre-requisites*
		15	
Fourth Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
CIS222	Data Acquisition and Analysis▲	3	CPD121
CIS223	IT Project Management▲	3	ITD122 **or** (ITD105 and ITD106) **and** CPD121
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121
HIT229	Healthcare Information Systems and Technology	3	(HIT224 and ITD122) **or** CIS126
		15	
	TOTAL CREDITS	**61**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

+ Students in the Medical Informatics Major are required to take HIT230, HIT121 is required for Health Information Management Students only.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲ Course offerings vary by semester. Please see your academic advisor for availability.

*Social Sciences Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

5026

COMPUTER MAINTENANCE & DESKTOP SUPPORT TECHNICIAN

(One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS121	Help Desk and Computer Support Concepts^▲	3	IDS102 **or** Proficiency	
CIS126	Fundamentals of Information Systems▲	3	ITD 122 **or** (ITD105 and ITD106)	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
NET131	Microsoft Client Operating System	3	NET120 **and** NET121	
NET244	Microsoft Networking I	3	NET120 **and** NET121	
	Total	**21**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency	
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency	
ITD123	MAC Concepts	1		
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
	Total	**10**		
	TOTAL CREDIT HOURS	**31**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

COMPUTER MAINTENANCE & DESKTOP SUPPORT TECHNICIAN

(One-Year Certificate)

Effective Summer 2014

Summer Semester		**Credit Hours**	**Pre- or Co-requisite**
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ID100 or Proficiency)
		7	
Second Semester			
CIS121	Help Desk and Customer Support Concepts^▲	3	IDS102 **or** Proficiency
CIS126	Fundamentals of Information Systems▲	3	ITD122 **or** (ITD105 and ITD106)
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	3	
		12	
Third Semester			
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency
CPD222	Microsoft SQL Server Database▲	3	CPD121
ITD123	MAC Concepts	1	
NET131	Microsoft Client Operating System	3	NET120 **and** NET121
NET244	Microsoft Networking I	3	NET120 **and** NET121
		12	
	TOTAL CREDITS	**31**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED SCIENCE

5460

MUSIC PRODUCTION AND ENGINEERING

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT129	Digital Audio Recording and Editing	3		
IMT134	Technical Musicianship	3	IMT135	
IMT135	Music Theory and Composition I	3		
IMT239	Music Synthesis I	3	IMT129 **and** IMT247	
IMT246	Applied Music Technology	3	IMT250	
IMT247	Music Theory and Composition II	3	IMT135	
IMT250	Music Technology	3	IMT129	
IMT259	Music Synthesis II	3	IMT239	
IMT260	Live Sound	3	IMT129	
IMT261	Advanced Music Technology	3	IMT239 **and** Co-IMT246	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
BIO126	Science, Energy, & the Environment (lab)	4		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
IMT121	Interactive Media	3		
IMT223	Digital Video Recording and Editing	3	IMT121	
IMT230	Webcasting and Music Publishing	3	IMT129	
IMT266	Film Theory and Practice	3	IMT121	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
ITD123	MAC Concepts	1		
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
	*Select one (1) Social Science Elective from the list below**	3	*Check for pre-requisites*	
	Total	**33**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.
*****Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MUSIC PRODUCTION AND ENGINEERING

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
IMT121	Interactive Media	3	
IMT129	Digital Audio Recording and Editing	3	
IMT135	Music Theory and Composition I	3	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
ITD123	MAC Concepts	1	
		14	
Second Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
IMT134	Technical Musicianship	3	IMT135
IMT223	Digital Video Recording and Editing	3	IMT121
IMT247	Music Theory and Composition II	3	IMT135
IMT250	Music Technology	3	IMT129
		15	
Summer Semester			
COM121	Effective Speaking	3	
BIO126	Science, Energy, & the Environment (lab)	4	
		7	
Third Semester			
IMT239	Music Synthesis	3	IMT129 **and** IMT247
IMT246	Applied Music Technology	3	IMT250
IMT260	Live Sound	3	IMT129
IMT266	Film Theory and Practice	3	IMT121
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **o**r Proficiency
		15	
Fourth Semester			
IMT230	Webcasting	3	IMT129
IMT259	Music Synthesis II	3	IMT239
IMT261	Advanced Music Technology	3	IMT239 **and** Co-IMT246
*Social Science Elective**		3	*Check for pre-requisites*
		12	
	TOTAL CREDITS	**63**	

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

*****Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

5100

WEB DESIGN AND DEVELOPMENT

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CSE229	Visual Basic Development▲	3	CSE122	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
WDD122	Web Graphics Design▲	3	WDD121	
WDD221	Web Development with JavaScript and AJAX▲	3	WDD121	
WDD222	Advanced Cascading Style Sheets▲	3	WDD121	
WDD223	Content Management System Design and Development▲	3	CPD121 **and** WDD121	
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121	
WDD225	Advanced Active Server Page Development▲	3	WDD224	
WDD226	Web Development with PHP and MySQL▲	3	CSE122 **and** WDD121	
WDD227	Advanced Web Development with PHP and MySQL▲	3	WDD226	
	Total	**33**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD102	Computer Applications – Word^	1	ITD100 **or** Proficiency	
ITD106	Computer Applications – Access^	1	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD228	Search Engine Optimization	3	WDD121	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Social Science Elective from the list below**	3	*Check for pre-requisites*	
	Total	**30**		
	TOTAL CREDIT HOURS	**63**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221
**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

WEB DESIGN AND DEVELOPMENT

Effective Summer 2014

First Semester	**Course Title**	**Credit Hours**	**Pre- and Co-requisites**
SSC101	Student Success Seminar^^	1	*Take first semester*
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
ENG124	College Composition^	3	ENG011 **or** Proficiency
ITD102	Computer Applications -Word^	1	ITD100 **or** Proficiency
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency)
		15	**and** (ITD100 or Proficiency)
Second Semester			
CSE229	Visual Basic Development▲	3	CSE122
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
WDD221	Web Development with JavaScript and AJAX▲	3	WDD121
WDD222	Advanced Cascading Style Sheets▲	3	WDD121
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121
		15	
Summer Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
*Arts & Humanities Elective***		3	*Check for pre-requisites*
		6	
Third Semester			
CPD222	Microsoft SQL Server Database▲	3	CPD121
*Social Sciences Elective**		3	*Check for pre-requisites*
WDD122	Web Graphics Design▲	3	WDD121
WDD225	Advanced Active Server Page Development▲	3	WDD224
WDD226	Web Development with PHP and MySQL▲	3	CSE122 **and** WDD121
		15	
Fourth Semester			
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121
WDD223	Content Management System Design and Development▲	3	CPD121 **and** WDD121
WDD227	Advanced Web Development with PHP and MySQL▲	3	WDD226
WDD228	Search Engine Optimization▲	3	WDD121
		12	
	TOTAL CREDITS	**63**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ASSOCIATE OF APPLIED BUSINESS

5104

WEB DESIGN AND DEVELOPMENT – WEB DESIGN MAJOR

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS223	IT Project Management▲	3	ITD122 **or** (ITD105 and ITD106)) **and** CPD121	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CSE121	Mobile Development Architecture▲	3	Co-CSE122	
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121	
WDD122	Web Graphics Design▲	3	WDD121	
WDD123	Internet Design Tools▲	3	WDD121	
WDD221	Web Development with JavaScript and AJAX▲	3	WDD121	
WDD222	Advanced Cascading Style Sheets▲	3	WDD121	
WDD223	Content Management Systems Design and Development▲	3	CPD121 **and** WDD121	
WDD229	Advanced Web Design▲	3	WDD122	
	Total	**30**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD102	Computer Applications - Word^	1	ITD100 **or** Proficiency	
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency	
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD228	Search Engine Optimization	3	WDD121	
	*Select one (1) Arts & Humanities Elective from the list below*****	3	*Check for pre-requisites*	
	*Select one (1) Social Science Elective from the list below**	3	*Check for pre-requisites*	
	Total	**31**		
	TOTAL CREDIT HOURS	**61**		

^Based upon SSC placement score.
^^To promote student success, this course should be taken in the first semester.
♦ Requires a 'B' or better.
Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.
▲Course offerings vary by semester. Please see your academic advisor for availability.
*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221
**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

WEB DESIGN AND DEVELOPMENT – WEB DESIGN MAJOR

Effective Summer 2014

First Semester	**Course Title**	**Credit Hours**	**Pre- and Co-requisites**
SSC101	Student Success Seminar^^	1	*Take first semester*
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
ITD102	Computer Applications - Word^	1	ITD100 **or** Proficiency
ITD105	Computer Applications - Excel^	1	ITD100 **or** Proficiency
ITD106	Computer Applications - Access^	1	ITD100 **or** Proficiency
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		13	
Second Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
WDD123	Internet Design Tools▲	3	WDD121
WDD221	Web Development with JavaScript and AJAX▲	3	WDD121
WDD223	Content Management Systems Design & Dev▲	3	CPD121 **and** WDD121
WDD222	Advanced Cascading Style Sheets▲	3	WDD121
		15	
Summer Semester			
COM121 **or** COM122 **or** COM123	Effective Speaking **or** Interpersonal Communication **or** Small Group Communication	3	None/None/ENG124
*Social Sciences Elective**		3	*Check for pre-requisites*
		6	
Third Semester			
*Arts & Humanities Elective***		3	*Check for pre-requisites*
CPD222	Microsoft SQL Server Database▲	3	CPD121
CSE121	Mobile Development Architecture▲	3	Co-CSE122
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
WDD122	Web Graphics Design▲	3	WDD121
		15	
Fourth Semester			
CIS223	IT Project Management▲	3	ITD122 **or** (ITD105 and ITD106)) **and** CPD121
CSE236	Analyzing Software Requirements and Developing Solutions▲	3	(CIS221 or CSE229 or CSE233 or CSE231 or WDD221 or CSE227 or WDD224 or WDD222 or WDD226) **and** CPD121
WDD228	Search Engine Optimization	3	WDD121
WDD229	Advanced Web Design▲	3	WDD122
		12	
	TOTAL CREDITS	**61**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

*Social Science Electives: PSC121, PSY121, SOC121, SOC225, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221

**Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

ONE-YEAR CERTIFICATE

5125

WEB DESIGN (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
WDD122	Web Graphics Design▲	3	WDD121	
WDD123	Internet Design Tools▲	3	WDD121	
WDD223	Content Management Systems Design and Development▲	3	CPD121 **and** WDD121	
WDD221	Web Development with JavaScript and AJAX▲	3	WDD121	
WDD222	Advanced Cascading Style Sheets▲	3	WDD121	
WDD228	Search Engine Optimization▲	3	WDD121	
WDD229	Advanced Web Design▲	3	WDD122	
	Total	**21**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
CPD121	Data Modeling and Database Design	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency	
WDD121	Internet/Intranet Design and Development ^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
	Total	**10**		
	TOTAL CREDIT HOURS	**31**		

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

♦ Requires a 'B' or better.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲Course offerings vary by semester. Please see your academic advisor for availability.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

WEB DESIGN (One-Year Certificate)

Effective Summer 2014

Summer Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH106	Math for Technology^Ω	3	(MTH091 and MTH092)♦ **or** Proficiency
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		7	
Second Semester			
CPD121	Data Modeling and Database Design	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
WDD122	Web Graphics Design▲	3	WDD121
WDD123	Internet Design Tools▲	3	WDD121
WDD221	Web Development with JavaScript and AJAX▲	3	WDD121
		12	
Third Semester			
WDD222	Advanced Cascading Style Sheets▲	3	WDD121
WDD223	Content Management Systems Design and Development▲	3	CPD121 **and** WDD121
WDD228	Search Engine Optimization▲	3	WDD121
WDD229	Advanced Web Design▲	3	WDD122
		12	
	TOTAL CREDITS	**31**	

^ Based upon SSC placement score.

^^ To promote student success, this course should be taken in the first semester.

Ω MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

▲ Course offerings vary by semester. Please see your academic advisor for availability.

♦ Requires a 'B' or better.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2125

JUDICIAL REPORTING AND CAPTIONING – BROADCAST CAPTIONING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IRT121	Realtime Theory I	4		
IRT122	Realtime Theory II	4	IRT121	
IRT129	Speed Building I	4	IRT122	
IRT130	Speed Building II	4	IRT129	
IRT123	Speed Building III	4	IRT130	
IRT230	Basic Broadcast Captioning▲	3	IRT122	
IRT235	Advanced Broadcast Captioning▲	3	IRT230	
	TOTAL CREDIT HOURS	**26**		

▲Course offerings vary by semester. Please see your academic advisor for availability.

The *Broadcast Captioning Career Enhancement Certificate* in the Information Reporting Technology program is the outgrowth of the court reporting field and is a highly developed skill used to translate spoken communication into visual communication. Specially trained reporters use this technology to provide captions of live television programs such as news, emergency broadcasts, sports events, the Oscars and Emmys, and other live programs. Captions allow people who are deaf or hard of hearing – and there are 28 million of them in the U.S. alone – to understand TV broadcasts by displaying the spoken word onto the television screen through a combination of technology and reporting skill known as realtime translation. A stenotype machine is connected to a state-of-the-art computer with special closed-captioning software that allows the writer to caption the spoken word instantly.

Stark State College offers the *Broadcast Captioning Career Enhancement Certificate* entirely through distance learning. It affords students the opportunity to complete a college education via distance education from home and at their convenience. It also affords students the opportunity to learn with flexibility of time and place while maintaining access to faculty and other College services. E-Learning is a unique alternative to traditional on-campus courses. Stark State College offers nationally accredited online degrees, certificates, and more than 130 online courses.

Another college degree is recommended before enrolling in this certificate program, but is not required. Please contact Julie Hardgrove (330-966-5453, ext. 4358) or Rene Eneix (330-966-5453, ext. 4876) if you have further questions.

SOFTWARE/MACHINE – A computerized stenograph machine and Case Catalyst student version software must be purchased prior to beginning this program. Please contact an academic advisor in the JRC program for more information.

Revised 2/2014

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

JUDICIAL REPORTING AND CAPTIONING – BROADCAST CAPTIONING

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
IRT121	Realtime Theory I	**4**	
Second Semester			
IRT122	Realtime Theory II	**4**	IRT121
Third Semester			
IRT129	Speed Building I	**4**	IRT122
Fourth Semester			
IRT130	Speed Building II	4	IRT129
IRT230	Basic Broadcast Captioning▲	3	IRT122
		7	
Fifth Semester			
IRT123	Speed Building III	4	IRT130
IRT235	Advanced Broadcast Captioning▲	3	IRT230
		7	
	TOTAL CREDITS	**26**	

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2126

JUDICIAL REPORTING AND CAPTIONING – REALTIME TRANSCRIPTION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IRT121	Realtime Theory I	4		
IRT122	Realtime Theory II	4	IRT121	
IRT129	Speed Building I	4	IRT122	
IRT130	Speed Building II	4	IRT129	
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133	
	TOTAL CREDIT HOURS	**19**		

▲Course offerings vary by semester. Please see your academic advisor for availability.

Realtime transcriptionists who develop the ability to use the shorthand machine as the input device for text entry are availing themselves of a multitude of job opportunities. In the "Information Age," companies are searching for staff that can input text at high accurate rates of speed. These companies are looking nationwide for well-trained information reporters who have good vocabulary, excellent English skills, good transcription skills, and the ability to turn their work around quickly.

The Realtime Transcription Option provides training to students on how to use the shorthand machine as an input device in lieu of the QWERTY keyboard and, therefore, produce text at lightning fast speeds. The steno strokes are translated as they are written using a stored dictionary, and the resulting English text is input directly into the selected PC application. Not only can the reporters write text, they can also use steno strokes to send commands to the operating system or the application. The reporter can conduct all word processing functions from the shorthand machine and produce the document in a timely fashion without ever touching the keyboard or the mouse.

Stark State College offers the *Realtime Transcription Career Enhancement Certificate* entirely through distance learning. It affords students the opportunity to complete a college education via distance education from home and at their convenience. It also affords students the opportunity to learn with flexibility of time and place while maintaining access to faculty and other College services. E-Learning is a unique alternative to traditional on-campus courses. Stark State College offers nationally accredited online degrees, certificates and more than 130 online courses.

Another college degree is recommended before enrolling in this certificate program, but is not required. Please contact Julie Hardgrove (330-966-5453, ext. 4358) or Rene Eneix (330-966-5453, ext. 4876) if you have further questions.

SOFTWARE/MACHINE – A computerized stenograph machine and Case Catalyst student version software must be purchased prior to beginning this program. Please contact an academic advisor in the JRC program for more information.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

JUDICIAL REPORTING AND CAPTIONING – REALTIME TRANSCRIPTION

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
IRT121	Realtime Theory I	**4**	
Second Semester			
IRT122	Realtime Theory II	4	IRT121
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133
		7	
Third Semester			
IRT129	Speed Building I	**4**	IRT122
Fourth Semester			
IRT130	Speed Building II	**4**	IRT129
	TOTAL CREDITS	**19**	

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2127

ADMINISTRATIVE SERVICES AND OFFICE APPLICATIONS – FORMATTING AND OFFICE SKILLS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ITD122	Computer Applications for Professionals^*	3	ITD100 **or** Proficiency	
AOT121	Keyboarding/Formatting	3		
AOT129	Keyboarding Skill Building	1	AOT121	
AOT130	Editing, Proofreading, and Language Skills	3		
AOT132	Records Management^	3	IDS102 **or** Proficiency	
AOT127	Word Processing Microsoft Word	3	AOT121 **and** (ITD100 **or** Proficiency)	
	TOTAL CREDIT HOURS	**16**		

^Based upon SSC placement score.

*Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

ADMINISTRATIVE SERVICES AND OFFICE APPLICATIONS – FORMATTING AND OFFICE SKILLS

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
ITD122	Computer Applications for Professionals^*	3	ITD100 **or** Proficiency
AOT121	Keyboarding/Formatting	3	
AOT130	Editing, Proofreading, and Language Skills	3	
		9	
Second Semester			
AOT129	Keyboarding Skill Building	1	AOT121
AOT132	Records Management^	3	IDS102 **or** Proficiency
AOT127	Word Processing Microsoft Word	3	AOT121 **and** (ITD100 **or** Proficiency)
		7	
	TOTAL CREDITS	**16**	

^Based upon SSC placement score.
*Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2155

JUDICIAL REPORTING AND CAPTIONING – JUDICIAL REPORTING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IRT121	Realtime Theory I	4		
IRT122	Realtime Theory II	4	IRT121	
IRT129	Speed Building I	4	IRT122	
IRT130	Speed Building II	4	IRT129	
IRT123	Speed Building III	4	IRT130	
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133	
IRT231	Judicial Procedures▲	3	IRT229 **and** (IRT122 or IRT133)	
IRT232	JRC Internship▲	2	*Department Chair Approval*	
	TOTAL CREDIT HOURS	**28**		

▲Course offerings vary by semester. Please see your academic advisor for availability.

Reporting has joined the ranks of the information technologies professions because computers are an integral part of information reporting. Official court reporters work for the judicial system to convert the spoken word into text during courtroom proceedings. The reporter also prepares official verbatim transcripts to be used by attorneys, judges, and litigants. Official court reporters are front and center at controversial or famous cases ensuring an accurate, complete, and secure record of the proceedings is produced. Official court reporters may also provide realtime translation during a courtroom setting to allow participants to read on a display screen or computer monitor what is being said instantaneously. Freelance reporters are hired by attorneys, corporations, unions, associations, and other individuals and groups who need accurate, complete and secure records of pretrial depositions, arbitrations, board of director meetings, stockholders meetings and convention business sessions.

Stark State College offers the *Judicial Reporting Career Enhancement Certificate* entirely through distance learning. It affords students the opportunity to complete a college education via distance education from home and at their convenience. It also affords students the opportunity to learn with flexibility of time and place while maintaining access to faculty and other College services. E-Learning is a unique alternative to traditional on-campus courses. Stark State College offers nationally accredited online degrees, certificates and more than 130 online courses.

Another college degree is recommended before enrolling in this certificate program, but is not required. Please contact Julie Hardgrove (330-966-5453, ext. 4358) or Rene Eneix (330-966-5453, ext. 4876) if you have further questions.

SOFTWARE/MACHINE – A computerized stenograph machine and Case Catalyst student version software must be purchased prior to beginning this program. Please contact an academic advisor in the JRC program for more information.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

JUDICIAL REPORTING AND CAPTIONING – JUDICIAL REPORTING

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
IRT121	Realtime Theory I	**4**	
Second Semester			
IRT122	Realtime Theory II	4	IRT121
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133
		7	
Third Semester			
IRT129	Speed Building I	**4**	IRT122
Fourth Semester			
IRT130	Speed Building II	4	IRT129
IRT231	Judicial Procedures▲	3	IRT229 **and** (IRT122 or IRT133)
		7	
Fifth Semester			
IRT123	Speed Building III	4	IRT130
IRT232	JRC Internship▲	2	*Department Chair Approval*
		6	
	TOTAL CREDITS	**28**	

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2156

ADMINISTRATIVE SERVICES AND OFFICE APPLICATIONS – DESKTOP PUBLISHING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ITD122	Computer Applications for Professionals^*	3	ITD100 **or** Proficiency	
AOT128	Desktop Publishing – Microsoft Publisher▲	3	ITD122 **and** IMT122	
IMT122	Graphic Arts Design	3		
AOT134	Form Design Essentials▲	1		
	TOTAL CREDIT HOURS	**10**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ITD122	Computer Applications for Professionals^*	3	ITD100 **or** Proficiency
IMT122	Graphic Arts Design	3	
AOT134	Form Design Essentials▲	1	
		7	
Second Semester			
AOT128	Desktop Publishing – Microsoft Publisher▲	**3**	ITD122 **and** IMT122
	TOTAL CREDITS	**10**	

^Based upon SSC placement score.

*Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Revised 2/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

2157

JUDICIAL REPORTING AND CAPTIONING – SCOPIST

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IRT133	Theory for Scopists	3		
IRT229	Realtime Software Applications▲	3	IRT121 **or** IRT133	
IRT231	Judicial Procedures	3	IRT229 **and** (IRT122 or IRT133)	
IRT233	Transcription & Editing for Scopists	3	IRT229 **and** IRT231 **and** (IRT133 or IRT122)	
	TOTAL CREDIT HOURS	**12**		

▲Course offerings vary by semester. Please see your academic advisor for availability.

Scopists are hired by court reporters to edit and proofread transcripts while the reporters work in court or take depositions. According to the National Court Reporters Association (NCRA), there are an estimated 50,000 court reporters in the United States. Scoping is an ideal career for a person who prefers to work at home, and it provides flexibility in choosing how many hours you want to work.

The job of the Scopist is to edit the stenograph-to-English translation of the trial proceeding recorded by the reporter and check for any mistranslations in order to correct words such as proper names and any technical terms. A Scopist uses specialized reporting software to review, edit, and proofread the court transcript that can easily be transferred via online services.

Another college degree is recommended before enrolling in this certificate program, but is not required. Please contact Julie Hardgrove (330-966-5453, ext. 4358) or Rene Eneix (330-966-5453, ext. 4876) if you have further questions.

SOFTWARE/MACHINE – A computerized stenograph machine and Case Catalyst student version software must be purchased prior to beginning this program. Please contact an academic advisor in the JRC program for more information.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

JUDICIAL REPORTING AND CAPTIONING – SCOPIST

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
IRT133	Theory for Scopists	**3**	
Second Semester			
IRT229	Realtime Software Applications▲	**3**	IRT121 **or** IRT133
Third Semester			
IRT231	Judicial Procedures	**3**	IRT229 **and** (IRT122 or IRT133)
Fourth Semester			
IRT233	Transcription & Editing for Scopists	**3**	IRT229 **and** IRT231 **and** (IRT133 or IRT122)
	TOTAL CREDITS	**12**	

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5013

MANAGEMENT INFORMATION SYSTEMS – PROJECT MANAGEMENT

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
CPD121	Data Modeling and Database Design	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CIS124	ITIL Foundations	3	ITD122 **or** (ITD105 and ITD106)	
CIS126	Fundamentals of Information Systems	3	ITD122 **or** (ITD105 and ITD106)	
CIS223	IT Project Management	3	(ITD122 or (ITD105 and ITD106)) **and** CPD121	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		**Credit Hours**	**Pre- and Co-requisites**
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		6	
Second Semester			
CIS126	Fundamentals of Information Systems	3	ITD122 **or** (ITD105 and ITD106)
CIS124	ITIL Foundations	3	ITD122 **or** (ITD105 and ITD106)
CIS223	IT Project Management	3	(ITD122 or (ITD105 and ITD106)) **and** CPD121
		9	
	TOTAL CREDITS	**15**	

^Based upon SSC placement score.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5024

ADMINISTRATIVE SERVICES AND OFFICE APPLICATIONS – MICROSOFT APPLICATIONS PROFESSIONAL

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ITD122	Computer Applications for Professionals^*	3	ITD100 **or** Proficiency	
AOT121	Keyboarding/Formatting	3		
ITD108	Microsoft – Outlook	1		
AOT127	Word Processing - Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)	
AOT226	Spreadsheet - Microsoft Excel^▲	3	ITD100 **or** Proficiency	
AOT236	Database Applications - Microsoft Access^▲	3	ITD100 **or** Proficiency	
	TOTAL CREDIT HOURS	**16**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ITD122	Computer Applications for Professionals^*	3	ITD100 **or** Proficiency
AOT121	Keyboarding/Formatting	3	
ITD108	Microsoft – Outlook	1	
		7	
Second Semester			
AOT127	Word Processing – Microsoft Word^	3	AOT121 **and** (ITD100 or Proficiency)
AOT226	Spreadsheet – Microsoft Excel^▲	3	ITD100 **or** Proficiency
AOT236	Database Applications – Microsoft Access^▲	3	ITD100 **or** Proficiency
		9	
	TOTAL CREDITS	**16**	

^Based upon SSC placement score.

*Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

▲Course offerings vary by semester. Please see your academic advisor for availability.

Revised 2/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5105

WEB DESIGN AND DEVELOPMENT – WEB DEVELOPMENT

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD122	Web Graphics Design▲	3	WDD121	
WDD123	Internet Design Tools▲	3	WDD121	
WDD124	Flash Animation and Design▲	3	WDD121	
WDD125	Microsoft Expression Studio▲	3	WDD121	
WDD230	Advanced Flash Animation and Design▲	3	WDD124	
	TOTAL CREDIT HOURS	**18**		

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

WEB DESIGN AND DEVELOPMENT – WEB DEVELOPMENT

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
WDD121	Internet/Intranet Design and Development^	**3**	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
Second Semester			
WDD122	Web Graphics Design▲	3	WDD121
WDD123	Internet Design Tools▲	3	WDD121
WDD124	Flash Animation and Design▲	3	WDD121
		9	
Third Semester			
WDD125	Microsoft Expression Studio▲	3	WDD121
WDD230	Advanced Flash Animation and Design▲	3	WDD124
		6	
	TOTAL CREDITS	**18**	

^Based upon SSC placement score.
▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5106

WEB DESIGN AND DEVELOPMENT – WEB MASTER

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD123	Internet Design Tools▲	3	WDD121	
WDD124	Flash Animation and Design▲	3	WDD121	
WDD221	Web Development with JavaScript and AJAX▲	3	WDD121	
WDD222	Advanced Cascading Style Sheets▲	3	WDD121	
	TOTAL CREDIT HOURS	**15**		

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

WEB DESIGN AND DEVELOPMENT – WEB MASTER

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
WDD121	Internet/Intranet Design and Development^	**3**	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
Second Semester			
WDD123	Internet Design Tools▲	3	WDD121
WDD124	Flash Animation and Design▲	3	WDD121
		6	
Third Semester			
WDD221	Web Development with JavaScript and AJAX▲	3	WDD121
WDD222	Advanced Cascading Style Sheets▲	3	WDD121
		6	
	TOTAL CREDITS	**15**	

^Based upon SSC placement score.
▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5107

WEB DESIGN AND DEVELOPMENT – ADVANCED WEB MASTER

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121	
WDD225	Advanced Active Server Page Development▲	3	WDD224	
WDD226	Web Development with PHP and MySQL▲	3	CSE122 **and** WDD121	
WDD227	Advanced Web Dev with PHP and MySQL▲	3	WDD226	
	TOTAL CREDIT HOURS	**24**		

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

WEB DESIGN AND DEVELOPMENT – ADVANCED WEB MASTER

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		6	
Second Semester			
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121
WDD226	Web Development with PHP and MySQL▲	3	CSE122 **and** WDD121
		6	
Third Semester			
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
WDD227	Advanced Web Development with PHP and MySQL▲	3	WDD226
		6	
Fourth Semester			
CPD222	Microsoft SQL Server Database▲	3	CPD121
WDD225	Advanced Active Server Page Development▲	3	WDD224
		6	
	TOTAL CREDITS	**24**	

^Based upon SSC placement score.
▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5108

WEB DESIGN AND DEVELOPMENT – VISUAL BASIC PROGRAMMING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE229	Visual Basic Development▲	3	CSE122	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121	
CSE230	Advanced Visual Basic Development▲	3	CSE229	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD225	Advanced Active Server Page Development▲	3	WDD224	
	TOTAL CREDIT HOURS	**21**		

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

WEB DESIGN AND DEVELOPMENT – VISUAL BASIC PROGRAMMING

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		9	
Second Semester			
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121
CSE229	Visual Basic Development▲	3	CSE122
		6	
Third Semester			
CSE230	Advanced Visual Basic Development▲	3	CSE229
WDD225	Advanced Active Server Page Development▲	3	WDD224
		6	
	TOTAL CREDITS	**21**	

^Based upon SSC placement score.
▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5206

COMPUTER PROGRAMMING AND DATABASE – MICROSOFT SQL SERVER

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CPD222	Microsoft SQL Server Database▲	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database▲	3	CPD222	
	TOTAL CREDIT HOURS	**9**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CPD121	Data Modeling and Database Design^	**3**	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
Second Semester			
CPD222	Microsoft SQL Server Database▲	**3**	CPD121
Third Semester			
CPD224	Advanced Microsoft SQL Server Database▲	**3**	CPD222
	TOTAL CREDITS	**9**	

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5207

COMPUTER PROGRAMMING AND DATABASE – ORACLE DATABASE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CPD122	Oracle Database: Introduction to SQL▲	3	CPD121	
CPD221	Oracle Database: PL/SQL Programming▲	3	CPD122 and CSE122	
CPD223	Oracle Database: Architecture and Administration▲	3	CPD122	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		6	
Second Semester			
CPD122	Oracle Database: Introduction to SQL▲	**3**	CPD121
Third Semester			
CPD221	Oracle Database: PL/SQL Programming▲	**3**	CPD122 **and** CSE122
Fourth Semester			
CPD223	Oracle Database: Architecture and Administration▲	**3**	CPD122
	TOTAL CREDITS	**15**	

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5254

COMPUTER SCIENCE AND ENGINEERING – C#.NET PROGRAMMING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE227	Windows Programming with C#▲	3	CSE122	
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121	
WDD225	Advanced Active Server Page Development▲	3	WDD224	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
		6	
Second Semester			
CSE227	Windows Programming with C#▲	3	CSE122
WDD224	Active Server Page Development▲	3	CSE122 **and** WDD121
		6	
Third Semester			
WDD225	Advanced Active Server Page Development▲	3	WDD224
	TOTAL CREDITS	**15**	

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5255

COMPUTER SCIENCE AND ENGINEERING – C++ / ASSEMBLY PROGRAMMING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE233	C++ Programming▲	3	CSE122	
CSE231	Java Programming▲	3	CSE122	
CSE234	Advanced C++ Programming▲	3	CSE233	
CSE228	Assembly Language Programming▲	3	CSE233 **or** CSE231	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
Second Semester			
CSE233	C++ Programming▲	3	CSE122
CSE231	Java Programming▲	3	CSE122
		6	
Third Semester			
CSE234	Advanced C++ Programming▲	3	CSE233
CSE228	Assembly Language Programming▲	3	CSE233 **or** CSE231
		6	
	TOTAL CREDITS	**15**	

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5256

COMPUTER SCIENCE AND ENGINEERING – VIDEO GAME PROGRAMMING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE233	C++ Programming▲	3	CSE122	
CSE234	Advanced C++ Programming▲	3	CSE233	
SGE121	Game Design^	3	IDS102 **or** Proficiency	
SGE221	Advanced Gaming and Simulation Topics▲	3	CSE234	
SGE222	3D Game Design and Development▲	3	SGE223	
SGE223	2D Game Design and Development▲	3	CSE233	
	TOTAL CREDIT HOURS	**21**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

		Credit Hours	Pre- and Co-requisites
First Semester			
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
SGE121	Game Design^	3	IDS102 **or** Proficiency
		6	
Second Semester			
CSE233	C++ Programming▲	**3**	CSE122
Third Semester			
CSE234	Advanced C++ Programming▲	3	CSE233
SGE223	2D Game Design and Development▲	3	CSE233
		6	
Fourth Semester			
SGE222	3D Game Design and Development▲	3	SGE223
SGE221	Advanced Gaming and Simulation Topics▲	3	CSE234
		6	
	TOTAL CREDITS	**21**	

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

Revised 2/2014

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5257

COMPUTER SCIENCE AND ENGINEERING – JAVA PROGRAMMING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CSE231	Java Programming▲	3	CSE122	
CSE232	Advanced Java Programming▲	3	CSE231	
CSE226	Software Engineering for Handheld Devices▲	3	CSE231	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
Second Semester			
CSE231	Java Programming▲	3	CSE122
Third Semester			
CSE232	Advanced Java Programming▲	3	CSE231
CSE226	Software Engineering for Handheld Devices▲	3	CSE231
		6	
	TOTAL CREDITS	**12**	

^Based upon SSC placement score.

▲Course offerings vary by semester. Please see your academic advisor for availability.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5405

UNIX / LINUX ADMINISTRATION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NET220	Unix/Linux Operating Environment^	3	MTH123 **or** Proficiency	
NET264	Unix/Linux System Administration	3	NET220	
NET266	Unix/Linux Network Administration	3	NET220	
	TOTAL CREDIT HOURS	**9**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
NET220	Unix/Linux Operating Environment^	**3**	MTH123 **or** Proficiency
Second Semester			
NET264	Unix/Linux System Administration	**3**	NET220
Third Semester			
NET266	Unix/Linux Network Administration	**3**	NET220
	TOTAL CREDITS	**9**	

^Based on SSC placement scores.

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5461

COMMERCIAL MUSIC TECHNOLOGY – MUSIC PRODUCTION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT121	Interactive Media	3		
IMT129	Digital Audio Recording and Editing	3		
IMT135	Music Theory and Composition I	3		
IMT247	Music Theory and Composition II	3	IMT135	
IMT250	Music Technology	3	IMT129	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
IMT121	Interactive Media	3	
IMT135	Music Theory and Composition I	3	
IMT129	Digital Audio Recording and Editing	3	
		9	
Second Semester			
IMT247	Music Theory and Composition II	3	IMT135
IMT250	Music Technology	3	IMT129
		6	
	TOTAL CREDITS	**15**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5502

GRAPHIC DESIGN

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT122	Graphic Arts Design	3		
IMT131	Color Theory and Design	3		
IMT137	Drawing Basics	3		
IMT253	Graphics for Illustration	3	IMT122	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
IMT122	Graphic Arts Design	3	
IMT131	Color Theory and Design	3	
		6	
Second Semester			
IMT137	Drawing Basics	3	
IMT253	Graphics for Illustration	3	IMT122
		6	
	TOTAL CREDITS	**12**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5503

DIGITAL PHOTOGRAPHY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT122	Graphic Arts Design	3		
IMT131	Color Theory and Design	3		
IMT132	Digital Photography	3		
IMT256	Digital Imaging	3	IMT122 **and** IMT132	
	TOTAL CREDIT HOURS	**12**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
IMT122	Graphic Arts Design	3	
IMT131	Color Theory and Design	3	
		6	
Second Semester			
IMT132	Digital Photography	3	
IMT256	Digital Imaging	3	IMT122 **and** IMT132
		6	
	TOTAL CREDITS	**12**	

ENGINEERING TECHNOLOGIES AND INFORMATION TECHNOLOGIES DIVISION

CAREER ENHANCEMENT CERTIFICATE

5576

COMPUTER PROGRAMMING AND DATABASE – GEOSPATIAL TECHNOLOGY PROFESSIONAL

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
GIS123	Maps and Map Reading▲	3		
GIS231	Geographic Information Systems▲	3	GIS123	
GIS232	Remote Sensing and Digital Image Processing▲	3	GIS123	
GIS233	Advanced Tools in Geospatial Technologies▲	3	GIS231 **and** GIS232	
GIS234	Geospatial Technologies in Industry▲	3	GIS233	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
GIS123	Maps and Map Reading▲	**3**	
Second Semester			
GIS231	Geographic Information Systems▲	3	GIS123
GIS232	Remote Sensing and Digital Image Processing▲	3	GIS123
		6	
Third Semester			
GIS233	Advanced Tools in Geospatial Technologies▲	**3**	GIS231 **and** GIS232
Fourth Semester			
GIS234	Geospatial Technologies in Industry▲	**3**	GIS233
	TOTAL CREDITS	**15**	

▲Course offerings vary by semester. Please see your academic advisor for availability.

LIBERAL ARTS

In an effort to meet the needs of students, courses required in each of the programs are scheduled in sequence to accommodate those attending on a full-time or part-time basis. All students should consult their academic advisors to plan their schedules and course sequence appropriately. In order to keep pace with progress, the College reserves the right to change fees, academic programs, course descriptions, or any other statements, contained in this catalog at the discretion of the College or its Board of Trustees.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7211

APPLIED SOCIOLOGY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
COMPUTER APPLICATIONS				
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency	
WRITTEN & ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
COM123	Intergroup Communication	3	ENG124	
COM125	Introduction to Communication Theory^	3	IDS102 **or** Proficiency	
SOCIOLOGICAL SCIENCES: ***21 credit hours required***				
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
SOC225	Cultural Diversity	3		
SOC228	Social Structure and the Individual	3	SOC121	
SOC229	The African-American Experience	3	SOC121	
SOC230	Applied Sociological Methods	3	SOC123 **and** SOC221 **and** SOC225 **and** SOC229 **and** SOC228 **and** MTH124	
BEHAVIORAL SCIENCES: ***6 credit hours minimum***				
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY123	Human Growth and Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY221	Abnormal Psychology	3	PSY121	
SOCIOLOGY ELECTIVES: ***3 credit hours minimum***				
COM225	Sex, Gender and Culture	3		
GER121	Introduction to Gerontology	3		
GER122	Psychosocial Aspects of Aging	3		
SOC122	Society and Technology	3		
SOC222	Juvenile Delinquency	3	SOC121	

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ARTS AND HUMANITIES: ***12 credit hours minimum***				
PHL122	Ethics **(required)**	3		
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
ENG233	British Literature Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
SCIENCES AND MATHEMATICS				
Natural and Physical Sciences: 7 credit hours minimum (1 lab course required)				
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO 141	
CHM101	Introduction to Chemistry^⅄	4	HS CHM 2 **or** (MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., & Bio Chemistry I (lab)^⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)^⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
Mathematics: 3 credit hours required				
MTH124	Statistics^ **(required)**	3	(MTH093 and MTH094)++ **or** Proficiency	
	TOTAL CREDITS HOURS	**62-65**		

^Based on SSC placement scores.
++Minimum grade of "C" required.
⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

APPLIED SOCIOLOGY

Effective Summer 2014

First Semester		Credit Hours	Prerequisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ITD122	Computer Applications For Professionals^ **(required)**	3	ITD 100 **or** Proficiency
ENG124	College Composition^ **(required)**	3	ENG 011 **or** Proficiency
Written & Oral Communication Elective [3]		3	*Check for Prerequisites*
SOC225	Cultural Diversity	3	
SOC121	Sociology^	3	IDS102 **or** Proficiency
		16	
Second Semester			
Arts & Humanities Elective [1]		3	*Check for Prerequisites*
SOC221	Social Problems	3	SOC121
SOC123	Dynamics of the Family	3	
Behavioral Sciences Elective [5]		3	*Check for Prerequisites*
Natural & Physical Sciences Elective ⅄ [2]		3-5	*Check for Prerequisites*
		15-17	
Third Semester			
Natural & Physical Sciences Elective ⅄ [2]		4-5	*Check for Prerequisites*
Arts & Humanities Elective [1]		3	*Check for Prerequisites*
SOC229	The African-American Experience	3	SOC121
SOC228	Social Structure and the Individual	3	SOC121
MTH124	Statistics **(required)**^	3	(MTH093 and MTH094)++
		16-17	**or** Proficiency
Fourth Semester			
Arts & Humanities Elective [1]		3	*Check for Prerequisites*
Sociology Elective [4]		3	*Check for Prerequisites*
Behavioral Sciences Elective [5]		3	*Check for Prerequisites*
PHL122	Ethics **(required)**	3	
SOC230	Applied Sociological Methods	3	SOC123 **and** SOC221 **and** SOC225 **and** SOC229 **and** SOC228 **and** MTH124
		15	
	TOTAL CREDITS	**62-65**	

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester

++Minimum grade of "C" required.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Arts & Humanities Electives: HIS121, HIS122, ENG233, ENG234, ENG236, ENG237

[2] Natural & Physical Sciences Electives: BIO121, BIO122, BIO124, BIO125, BIO126, BIO127, BIO128, BIO129, BIO130, BIO221, CHM101, CHM121, CHM 122, CHM141, CHM142, PHY101, PHY121, PHY125

[3] Written & Oral Communication Elective: ENG221, ENG230, ENG231, COM121, COM122, COM123, COM125

[4] Sociology Elective: COM225, GER121, GER122, SOC122, SOC222

[5] Behavioral Sciences Elective: PSY121, PSY123, PSY124, PSY221

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7100

ASSOCIATE OF ARTS – GENERAL

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
COMPUTER APPLICATIONS				
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency	
WRITTEN & ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
COM123	Small Group Communication	3	ENG124	
COM125	Introduction to Communication Theory^	3	IDS102 **or** Proficiency	
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours minimum***				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity **(required)**	3		
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY220	Social Psychology	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	

^ Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ARTS & HUMANITIES: ***12 credit hours minimum***				
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: 7 credit hours minimum (1 lab course required)				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., & Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)^⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
Mathematics: 3 credit hours minimum				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	

^ Based on SSC placement scores.
++Minimum grade of "C" required.
⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
ADDITIONAL ELECTIVES TO COMPLETE DEGREE		**21**		
	TOTAL CREDIT HOURS *(62 hour minimum)*			

ASSOCIATE OF ARTS ELECTIVES

The Associate of Arts Degree requires **a minimum of 62 credit hours**. Students should select additional courses from the previous page, choose elective courses from the list below, or receive approval from the department chair for other related electives. Please see your academic advisor for assistance with course selection.

ADDITIONAL LIBERAL ARTS COURSES	
Arts & Humanities	**English and Modern Languages**
ENG235 Introduction to Shakespeare (3)	ENG125 Technical Editing & Layout (3)
ENG239 Film Appreciation (3)	ENG126 Technical Grammar & Style (3)
ENG 240 Women's Literature (3)	ENG227 Writing for Media (3)
ENG241 Major Modern Writers (3)	ENG228 Writing for the Web (3)
Communication	ENG229 Grant Writing (3)
COM223 Interviewing (3)	ENG232 Scriptwriting (3)
Social and Behavioral Sciences	ENG238 Introduction to Creative Writing (3)
GER121 Introduction to Gerontology (3)	SPN100 Elementary Spanish I (4)
GER122 Psychosocial Aspects of Aging (3)	SPN200 Elementary Spanish II (4)
PSY125 Child Development (3)	CHN100 Elementary Chinese I (4)
PSY222 Psychological Aspects of Therapy (3)	CHN200 Elementary Chinese II (4)
SOC124 US Social Systems (3)	
SOC222 Juvenile Delinquency (3)	
ADDITIONAL SCIENCE COURSES	
Biology	
BIO101 Introduction to Anatomy & Physiology (3)	
BIO123 Principles of Human Structure & Function (5)#	
BIO222 Pharmacology (3)	

^ Based on SSC placement scores.
++Minimum grade of "C" required.
#BIO121 and BIO122 may be substituted for BIO123.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

ASSOCIATE OF ARTS – GENERAL

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency
Arts & Humanities Elective [1]		3	*Check for pre-requisite*
Arts & Humanities Elective [1]		3	*Check for pre-requisite*
Social & Behavioral Science Elective^ [5]		3	IDS102 **or** Proficiency
		16	
Second Semester			
Arts & Humanities Elective [1]		3	*Check for pre-requisite*
Mathematics Elective [2]		3-5	*Check for pre-requisite*
Natural & Physical Science Elective⅄ [3]		4-5	*Check for pre-requisite*
Written & Oral Communication Elective [4]		3	*Check for pre-requisite*
Elective [6]		3-4	IDS102 **or** Proficiency
		16-20	
Third Semester			
SOC225	Cultural Diversity **(required)**	3	
Natural & Physical Science Elective⅄ [3]		3-5	*Check for pre-requisite*
Arts & Humanities Elective [1]		3	*Check for pre-requisite*
Social & Behavioral Science Elective^ [5]		3	IDS102 **or** Proficiency
Elective [6]		3-5	*Check for pre-requisite*
		15-19	
Fourth Semester			
Elective [6]		3-4	*Check for pre-requisite*
Elective [6]		3-4	*Check for pre-requisite*
Elective [6]		3	*Check for pre-requisite*
Elective [6]		3	*Check for pre-requisite*
Elective [6]		3	*Check for pre-requisite*
		15-17	
	TOTAL CREDITS	**62-72**	

^ Based on SSC placement scores

^^ To promote student success, this course should be taken in the first semester

++Minimum grade of "C" required.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

[2] Mathematics Elective: MTH124, MTH125, MTH130, MTH135, MTH221, MTH223

[3] Natural & Physical Science Electives: BIO121, BIO122, BIO124, BIO125, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, BIO221, CHM101, CHM121, CHM122, CHM141, CHM142, PHY101, PHY121, PHY125, PHY122

[4] Written & Oral Communication Elective: ENG221, ENG230, ENG231, COM121, COM122, COM123, COM125

[5] Social & Behavioral Science Electives: PSC121, PSY121, SOC121, PSY122, PSY123, PSY124, PSY220, PSY221, SOC122, SOC123, SOC221, BUS122, BUS221, BUS222

[6] Electives: Select from ENG235, ENG239, ENG240, ENG241, COM223, ENG125, ENG126, ENG227, ENG228, ENG229, ENG232, ENG238, SPN100, SPN200, CHN100, CHN200, GER121, GER122, PSY125, PSY222, SOC124, SOC222, BIO101, BIO123, BIO222 OR ANY ADDITIONAL WRITTEN & ORAL COMMUNICATION, SOCIAL & BEHAVIORAL SCIENCES, ARTS & HUMANITIES, OR SCIENCE COURSES

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7101

*Dual Associate of Arts Degree Program

FINE ARTS TRACK

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CORE ART CLASSES (required)				
ARTF 14000 (KSU)	Drawing I	3	*Please consult KSU catalog*	
ART 14022 (KSU)	2-D Composition	3	*Please consult KSU catalog*	
ART 14023 (KSU)	3-D Composition	3	*Please consult KSU catalog*	
ARTF 14060 (KSU)	Painting I	3	*Please consult KSU catalog*	
ARTH 22006 (KSU)	Art History I	3	*Please consult KSU catalog*	
ARTH 22007 (KSU)	Art History II	3	*Please consult KSU catalog*	
	Total	**18**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Composition: ***6 credit hours required***				
ENG124	College Composition^ *-or ENG 11011 College English I (KSU)*	3	ENG011 **or** Proficiency	
ENG231	College Composition II *-or ENG 21011 College English II (KSU)*	3	ENG124	
Mathematics, Critical Reasoning: ***3 credit hours minimum***				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
-or select from Mathematics or Critical Reasoning on KSU Core list				
Humanities and Fine Arts: ***9 credit hours minimum***				
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature II: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
ARTH 22006 (KSU)	Art History I **(required)**	3	*Please consult KSU catalog*	
ARTH 22007 (KSU)	Art History II **(required)**	3	*Please consult KSU catalog*	

^ Based on SSC placement scores.

++Minimum grade of "C" required.

**** Notes:*** *Students must take a minimum of 15 hours at Kent State University Stark Campus and 15 hours at Stark State College* ***and*** *maintain a minimum GPA of 2.0 overall at both Kent State University Stark Campus and Stark State College.*

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Social Sciences: ***6 credit hours minimum*** *– courses must be in two subject areas*				
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
PSC121	Political Science	3		
SOC123	Dynamics of the Family	3		
SOC225	Cultural Diversity	3		
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^		IDS102 **or** Proficiency	
-or- select from KSU Core list for Anthropology, Conflict Management, Economics, Geography, Gerontology, Journalism, Justice Studies, Political Science, Psychology, or Sociology.				
Basic Sciences: ***7 credit hours minimum*** *Coursework must include at least one of the Basic Sciences laboratory courses plus any specified pre-requisite and/or co-requisite courses.*				
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., and Bio Chemistry I (lab)⅄	4	CHM101 **or** HS CHM 2	
CHM122	Gen., Org., and Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	CHM101 **or** HS CHM 2	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
-or select from KSU Core list for Anthropology, Biological Sciences, Chemistry, Geology, or Physics				

^Based on SSC placement scores.

++Minimum grade of "C" required.

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Additional SSC Transfer Module/KSU Core Requirements: ***6 credit hours minimum***				
Select one course each from any two previous categories except Composition.				
ADDITIONAL ELECTIVES TO COMPLETE DEGREE: 6 credit hours minimum *Students are encouraged to take* US 10097 *Destination Kent State at KSU-Stark or* SSC101 *Student Success Seminar at SSC as part of their elective selections.*				
Total				
TOTAL CREDIT HOURS *(61 hrs. minimum)*				

Students wishing to transfer to Kent State University for a baccalaureate degree completion through the College of Arts and Sciences are advised to visit http://www.kent.edu/gps/index.cfm for details on specific majors and their requirements.

Students may use ARTH 22006 and ARTH 22007 in technical requirements and in the Humanities & Fine Arts section. However, this may increase the number of elective hours a student will take.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7102

*Dual Associate of Arts Degree Program

INFO TECH TRACK

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Composition: ***6 credit hours required***				
ENG124	College Composition^ *-or ENG 11011 College English I (KSU)*	3	ENG011 **or** Proficiency	
ENG231	College Composition II *-or ENG 21011 College English II (KSU)*	3	ENG124	
Mathematics, Critical Reasoning: ***3 credit hours minimum***				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
-or select from Mathematics or Critical Reasoning on KSU Core list				
Humanities and Fine Arts: ***9 credit hours minimum*** *– three hours must be in fine arts*				
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
-or select from KSU Core Humanities courses in Classics, English, History, Pan-African Studies, Philosophy, Communication, Architecture, Art History, Music, or Theatre				
Social Sciences: ***6 credit hours minimum*** *– Courses must be in two subject areas*				
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	

^ Based on SSC placement scores.

++Minimum grade of "C" required.

**** Notes:*** *Students must take a minimum of 15 hours at Kent State University Stark Campus and 15 hours at Stark State College* **and** *maintain a minimum GPA of 2.0 overall at both Kent State University Stark Campus and Stark State College.*

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PSC121	Political Science	3		
SOC123	Dynamics of the Family	3		
SOC225	Cultural Diversity	3		
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
-or- select from KSU Core list for Anthropology, Conflict Management, Economics, Geography, Gerontology, Journalism, Justice Studies, Political Science, Psychology, or Sociology				
Basic Sciences: ***7 credit hours minimum*** *Coursework must include at least one of the Basic Sciences laboratory courses plus any specified pre-requisite and/or co-requisite courses.*				
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., and Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org., and Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 **or** Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
-or select from KSU Core list for Anthropology, Biological Sciences, Chemistry, Geology, or Physics				

^ Based on SSC placement scores.

++Minimum grade of "C" required.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Additional SSC Transfer Module/KSU Core Requirements: ***6 credit hours minimum*** *Select one course each from any two previous categories except Composition.*				
ADDITIONAL ELECTIVES TO COMPLETE DEGREE: 23 credit hours minimum *Students are encouraged to take* US 10097 *Destination Kent State at KSU-Stark or* SSC101 *Student Success Seminar at SSC as part of their elective selections.*				
TOTAL CREDIT HOURS *(60 hrs. minimum)*				

Students wishing to transfer to Kent State University for a baccalaureate degree completion through the College of Arts and Sciences are advised to visit http://www.kent.edu/gps/index.cfm for details on specific majors and their requirements.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7103

*Dual Associate of Arts Degree Program

FINE ARTS – MUSIC TRACK

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CORE CLASSES (required)				
MUS 11121 (KSU)	Music Theory	3	*Placement test* ***or*** *MUS 11111*	
MUS 17111 (KSU)	Piano Class	1	*Placement Test*	
MUS 25xxx, 35xxx **or** 45xxx (KSU)	Major Ensemble (2 semesters)	2	*Please consult KSU catalog*	
MUS 36xxx (KSU)	Applied Music Courses (4 semesters) **or** Studio Musicianship	8	*Please consult KSU catalog*	
TECHNICAL ELECTIVES: ***10 credit hours minimum***				
MUS 11110 (KSU)	Music Fundamentals	3	*Placement Test – could be required before taking MUS 11111*	
MUS 11111 (KSU)	Music Rudiments	3	*Placement Test – could be required before taking MUS 11121*	
MUS 11122 (KSU)	Music Theory	3	*MUS 11121*	
MUS 21121	Music Theory to 1750	3		
MUS 21122	Music Theory from 1750 to 1900	3	*MUS 21121*	
	Studio Ensemble (can be repeated)			
US 10097 (KSU) **or** SSC101 (SSC)	Destination Kent State (KSU-Stark) **or** Student Success (Stark State College)	1	*Please consult KSU catalog* ***or*** *SSC catalog*	
MUS 31211	Composition	2		
MUS 25311 (KSU)	Chamber Music	1	*Please consult KSU catalog*	
MUS 42161 (KSU)	History of Jazz	3	*Please consult KSU catalog*	
MUS 47012 (KSU)	Folk Guitar Class I	2	*Please consult KSU catalog*	
MUS 47311 (KSU)	Voice Class	1	*Please consult KSU catalog*	
	Total	**24**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Composition: ***6 credit hours minimum***				
ENG124	College Composition^ *-or ENG 11011 College English I (KSU)*	3	ENG011 **or** Proficiency	
ENG231	College Composition II *-or ENG 21011 College English II (KSU)*	3	ENG124	
Mathematics, Critical Reasoning: ***3 credit hours minimum***				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	

^ Based on SSC placement scores.

++Minimum grade of "C" required.

***** ***Notes:*** *Students must take a minimum of 15 hours at Kent State University Stark Campus and 15 hours at Stark State College* **and** *maintain a minimum GPA of 2.0 overall at both Kent State University Stark Campus and Stark State College.*

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 **and** MTH094)++ or Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
-or select from Mathematics or Critical Reasoning on KSU Core list				
Humanities and Fine Arts: ***9 credit hours minimum***				
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
-or select from KSU Core Humanities courses in Classics, English, History, Pan-African Studies, Philosophy, Communication, Architecture				
MUS 22121(KSU)	Music as a World Phenomenon **(required)**	3		
MUS 22111 (KSU)	Understanding Music **(required)**	3		
Social Sciences: ***6 credit hours minimum*** *– courses must be in two subject areas*				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC123	Dynamics of the Family	3		
SOC225	Cultural Diversity	3		
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
-or- select from KSU Core list for Anthropology, Conflict Management, Economics, Geography, Gerontology, Journalism, Justice Studies, Political Science, Psychology, or Sociology				
Basic Sciences: ***7 credit hours minimum*** *Coursework must include at least one of the Basic Sciences laboratory courses plus any specified pre-requisite and/or co-requisite courses.*				
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	

^Based on SSC placement scores.

++Minimum grade of "C" required.

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., and Bio Chemistry I (lab)⅄	4	CHM101 **or** HS CHM 2	
CHM122	Gen., Org., and Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	CHM101 **or** HS CHM 2	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH 125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
-or select from KSU Core list for Anthropology, Biological Sciences, Chemistry, Geology, or Physics				
Additional SSC Transfer Module/KSU Core Requirements: ***6 hours minimum***				
Select one course each from any two previous categories except Composition.				
	Total			
	TOTAL CREDIT HOURS *(61 hours minimum)*			

^Based on SSC placement scores.
++Minimum grade of "C" required.
⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Students wishing to transfer to Kent State University for a baccalaureate degree completion through the College of Arts and Sciences are advised to visit http://www.kent.edu/gps/index.cfm for details on specific majors and their requirements.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7104

*Dual Associate of Arts Degree Program

MATH SCIENCE TRACK

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Composition: ***6 credit hours required***				
ENG124	College Composition^ ***or*** *ENG 11011 College English I (KSU)*	3	ENG011 **or** Proficiency	
ENG231	College Composition II ***or*** *ENG 21011 College English II (KSU)*	3	ENG124	
Mathematics, Critical Reasoning: ***3 credit hours minimum***				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
-or select from Mathematics or Critical Reasoning on KSU Core list				
Humanities and Fine Arts: ***9 credit hours minimum***				
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
-or select from KSU Core Humanities courses in Classics, English, History, Pan-African Studies, Philosophy, Communication, Architecture, Art History, Music, or Theatre				
Social Sciences: ***6 credit hours minimum***				
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC123	Dynamics of the Family	3		
SOC225	Cultural Diversity	3		

^ Based on SSC placement scores.

++Minimum grade of "C" required.

***** ***Notes:*** *Students must take a minimum of 15 hours at Kent State University Stark Campus and 15 hours at Stark State College* **and** *maintain a minimum GPA of 2.0 overall at both Kent State University Stark Campus and Stark State College.*

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
-or- select from KSU Core list for Anthropology, Conflict Management, Economics, Geography, Gerontology, Journalism, Justice Studies, Political Science, Psychology, or Sociology				
Basic Sciences: ***7 credit hours minimum*** *Coursework must include at least one of the Basic Sciences laboratory courses plus any specified pre-requisite and/or co-requisite courses.*				
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., and Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org., and Bio Chemistry II (lab)	4	CHM121	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
-or select from KSU Core list for Anthropology, Biological Sciences, Chemistry, Geology, or Physics				
Additional SSC Transfer Module/KSU Core Requirements: ***9 credit hours required***				
CHM141	General Chemistry I⅄ **(required)**	5	HS CHM 2 **or** CHM101	
MTH223	Analytical Geometry and Calculus I^ **(required)**	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	

^ Based on SSC placement scores.

++Minimum grade of "C" required.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ADDITIONAL ELECTIVES TO COMPLETE DEGREE: 23 credit hours minimum *Students are encouraged to take* US 10097 *Destination Kent State at KSU-Stark or* SSC 101 *Student Success Seminar at SSC as part of their elective selections.*				
TOTAL CREDIT HOURS *(63 hours minimum)*				

Students wishing to transfer to Kent State University for a baccalaureate degree completion through the College of Arts and Sciences are advised to visit http://www.kent.edu/gps/index.cfm for details on specific majors and their requirements.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7105

**Dual Associate of Arts Degree Program*

GENERAL STUDIES TRACK

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Composition: ***6 credit hours required***				
ENG124	College Composition^ ***or*** *ENG 11011 College English I (KSU)*	3	ENG011 **or** Proficiency	
ENG231	College Composition II ***or*** *ENG 21011 College English II (KSU)*	3	ENG124	
Mathematics, Critical Reasoning: ***3 credit hours minimum***				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
-or select from Mathematics or Critical Reasoning on KSU Core list.				
Humanities and Fine Arts: ***9 credit hours minimum*** *– three hours must be in Fine Arts*				
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
-or select from KSU Core Humanities courses in Classics, English, History, Pan-African Studies, Philosophy, Communication, Architecture, Art History, Music, or Theatre				
Social Sciences: ***6 credit hours minimum*** *– courses must be in two subject areas*				
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
PSC121	Political Science	3		

^ Based on SSC placement scores.

++Minimum grade of "C" required.

**** Notes:*** *Students must take a minimum of 15 hours at Kent State University Stark Campus and 15 hours at Stark State College* ***and*** *maintain a minimum GPA of 2.0 overall at both Kent State University Stark Campus and Stark State College.*

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SOC123	Dynamics of the Family	3		
SOC225	Cultural Diversity	3		
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth and Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY221	Abnormal Psychology	3	PSY121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
-or- select from KSU Core list for Anthropology, Conflict Management, Economics, Geography, Gerontology, Journalism, Justice Studies, Political Science, Psychology, or Sociology.				
Basic Sciences: ***7 credit hours minimum*** *Coursework must include at least one of the Basic Sciences laboratory courses plus any specified pre-requisite and/or co-requisite courses.*				
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., and Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org., and Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH 125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
-or select from KSU Core list for Anthropology, Biological Sciences, Chemistry, Geology, or Physics				

^ Based on SSC placement scores

++Minimum grade of "C" required.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Additional SSC Transfer Module/KSU Core Requirements: ***6 credit hours minimum*** *Select one course each from any two previous categories except Composition.*				
ADDITIONAL ELECTIVES TO COMPLETE DEGREE: 23 credit hours minimum *Students are encouraged to take* US 10097 *Destination Kent State at KSU-Stark or* SSC101 *Student Success Seminar at SSC as part of their elective selections.*				
TOTAL CREDIT HOURS *(60 hours minimum)*				

Students wishing to transfer to Kent State University for a baccalaureate degree completion through the College of Arts and Sciences are advised to visit http://www.kent.edu/gps/index.cfm for details on specific majors and their requirements.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7215

COMMUNICATION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
CORE CLASSES: ***15 credit hours required***				
COM121	Effective Speaking **(required)**	3		
COM122	Interpersonal Communication **(required)**	3		
COM123	Small Group Communication **(required)**	3	ENG124	
COM125	Introduction to Communication Theory^ **(required)**	3	IDS102 **or** Proficiency	
COM126	Introduction to Mass Communication **(required)**	3		
COMMUNICATION ELECTIVES: ***6 credit hours minimum***				
COM127	Health Communication	3		
COM223	Interviewing I	3	COM122	
COM225	Sex, Gender, and Culture	3		
COM226	Organizational Communication	3		
COM227	Intercultural Communication	3	COM122	
COM228	Nonverbal Communication	3		
COM229	Persuasion^	3	IDS102 **or** Proficiency	
COM230	Argumentation^	3	COM121 **and** (IDS102 **or** Proficiency)	
COMPUTER APPLICATIONS: 3 ***credit hours required***				
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency	
ENGLISH COMPOSITION: ***6-7 credit hours minimum***				
ENG124	College Composition^ (**required**)	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	
ENG126	Technical Grammar and Style	3	ENG124 **and** ENG231	
SPN100	Elementary Spanish I	4		
SPN200	Elementary Spanish II	4		
CHN100	Elementary Chinese I	4		
CHN200	Elementary Chinese II	4		

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours minimum***				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth and Development	3	PSY121	
PSY124	Industrial / Organizational Psychology	3		
PSY220	Social Psychology	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
SOC225	Cultural Diversity (**required**)	3		
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ARTS & HUMANITIES: ***9 credit hours minimum***				
PHL122	Ethics	3		
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
HIS221	World Civilization to 17th Century	3		
HIS222	World Civilization from 17th Century	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: ***7-8 credit hours minimum (1 lab course required)***				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		

^Based on SSC placement scores.

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM101	Introduction to Chemistry^ ⍋	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., & Bio Chemistry I (lab) ⍋	4	HS CHM **or** CHM101	
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
Mathematics: ***4-5 credit hours minimum***				
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytic Geometry and Calculus I	4	MTH135 **or** (MTH125 and MTH130)	
	TOTAL CREDIT HOURS	**60-63**		

^Based on SSC placement scores.
++Minimum grade of "C" required.
⍋Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

COMMUNICATION

Effective Summer 2014

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	
ENG124	College Composition I^ **(required)**	3	ENG011 or Proficiency
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 or Proficiency
COM121	Effective Speaking **(required)**	3	
COM122	Interpersonal Communication **(required)**	3	
		13	
Second Semester			
English Composition Elective[5]		3-4	*Check for Pre-requisite.*
COM125	Introduction to Communication Theory^ **(required)**	3	IDS102 or Proficiency
Mathematics Elective[6]		4-5	*Check for Pre-requisite.*
Communication Elective[3]		3	*Check for Pre-requisite.*
Arts and Humanities Elective[4]		3	*Check for Pre-requisite.*
		16-18	
Third Semester			
COM123	Small Group Communication **(required)**	3	ENG124
Natural and Physical Science Elective[2] ⅄		3-4	*Check for Pre-requisite.*
SOC225	Cultural Diversity **(required)**	3	
Arts and Humanities Elective[4]		3	*Check for Pre-requisite.*
Social & Behavioral Science Elective[1]		3	*Check for Pre-requisite.*
		15-16	
Fourth Semester			
Natural and Physical Science Elective[2] ⅄		4	*Check for Pre-requisite.*
COM126	Introduction to Mass Communication **(required)**	3	
Communication Elective[3]		3	*Check for Pre-requisite.*
Social & Behavioral Science Elective[1]		3	*Check for Pre-requisite.*
Arts and Humanities Elective[4]		3	*Check for Pre-requisite.*
		16	
	TOTAL CREDITS	**60-63**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Social & Behavioral Science Electives: PSC121, PSY121, PSY122, PSY123, PSY124, PSY220, SOC121, SOC122, SOC123, SOC221 SOC225, BUS122, BUS221, BUS222

[2] Natural and Physical Science Electives: BIO121, BIO122, BIO124, BIO125, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, BIO221, CHM101, CHM121, CHM122, CHM141, CHM142, PHY101, PHY121, PHY122, PHY125

[3] Communication Electives: COM127, COM223, COM225, COM226, COM227, COM228, COM229, COM230

[4] Arts & Humanities Electives: PHL122, ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222

[5] English Composition Elective: ENG221, ENG230, ENG231, SPN100, SPN200, CHN100, CHN200

[6] Mathematics Elective: MTH125, MTH135, MTH223

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION
ASSOCIATE OF ARTS

1301

CRIMINAL JUSTICE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
COMPUTER APPLICATIONS				
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency	
WRITTEN & ORAL COMMUNICATION: ***9 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
COM123	Small Group Communication	3	ENG124	
SOCIAL & BEHAVIORAL SCIENCES: ***12 credit hours minimum***				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY122	Psychology of Adjustment	3	PSY121	
PSY220	Social Psychology	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
SOC222	Juvenile Delinquency	3	SOC121	
SOC225	Cultural Diversity **(required)**	3		
CRIMINAL JUSTICE: ***18 credit hours required***				
CJS121	Introduction to Criminal Justice	3		
CJS124	Policing	3	CJS121	
CJS129	Corrections	3	CJS121	
CJS221	Criminology	3	CJS121	
CJS222	Criminal Law in the United States	3	CJS121	
CJS223	Criminal Procedure	3	CJS121	
ARTS & HUMANITIES: ***6 credit hours minimum***				
PHL122	Ethics **(required)**	3		
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SCIENCES & MATHEMATICS				
***Natural & Physical Sciences*: 6 semester credit hours minimum (1 lab course required)**				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO125	Medical Terminology	3		
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., and Biol. Chemistry I (lab)⅄	4	HS CHM2 **or** CHM101	
CHM122	Gen., Org., and Biol. Chemistry II (lab)	4	CHM121	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** IDS102 or Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** IDS102 or Proficiency	
***Mathematics*: 3 semester credit hours minimum (required)**				
MTH124	Statistics^ **(required)**	3	(MTH093 and MTH094)++ **or** Proficiency	
ELECTIVES: ***3 credit hours minimum***				
ACC235	Forensic Accounting	3		
HLS121	Introduction to Emergency Management	3		
HLS122	Intelligence and Homeland Security	3		
HLS123	Homeland Defense and Crisis Management	3		
SWK125	Substance Abuse	3		
SWK225	Victimization and Crisis Intervention	3		
	TOTAL CREDIT HOURS	**61-63**		

^Based on SSC placement scores

++Minimum grade of "C" required.

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and/or biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make appointments to meet with their advisors before registering for classes each semester. The student should determine his or her course preferences for the semester prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish the degree in two years.

Selection of Elective Courses

Self-selection of courses and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

CRIMINAL JUSTICE

Effective Summer 2014

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency
PHL122	Ethics **(required)**	3	
CJS121	Introduction to Criminal Justice^	3	IDS102 **or** Proficiency
Social & Behavioral Sciences Elective [4]		3	*Check for pre-requisites*
		16	
Second Semester			
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
Natural & Physical Sciences Elective [2]		3-4	*Check for pre-requisites*
Social & Behavioral Sciences Elective [4]		3	*Check for pre-requisites*
CJS124	Policing	3	CJS121
CJS129	Corrections	3	CJS121
		15-16	
Third Semester			
Natural & Physical Sciences Elective [2]		3-4	*Check for pre-requisites*
Written & Oral Communication Elective [3]		3	*Check for pre-requisites*
SOC225	Cultural Diversity **(required)**	3	
CJS221	Criminology	3	CJS121
CJS222	Criminal Law in the United States	3	CJS121
		15-16	
Fourth Semester			
Arts & Humanities Elective [1]		3	*Check for pre-requisites*
Written & Oral Communication Elective [3]		3	*Check for pre-requisites*
Social & Behavioral Sciences Elective [4]		3	*Check for pre-requisites*
Elective [5]		3	*Check for pre-requisites*
CJS223	Criminal Procedure	3	CJS121
		15	
	TOTAL CREDITS	**61-63**	

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

[1] Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122

[2] Natural & Physical Sciences Electives: BIO121, BIO122, BIO125, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, CHM101, CHM121, CHM122, PHY101, PHY121, PHY122, PHY125.

[3] Written & Oral Communication Electives: ENG221, ENG231, COM121, COM122, COM123

[4] Social & Behavioral Sciences Electives: PSC121, PSY121, PSY122, PSY220, PSY221, SOC121, SOC123, SOC221, SOC222

[5] Electives: ACC235, HLS121, HLS122, HLS123, SWK125, SWK225

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7201

ENGLISH COMPOSITION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
COMPUTER APPLICATIONS				
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency	
ENGLISH COMPOSITION: ***6 credit hours required***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG231	College Composition II **(required)**	3	ENG124	
COMPOSITION ELECTIVES: ***6 credit hours minimum***				
ENG238	Introduction to Creative Writing	3	ENG124	
ENG221	Technical Report Writing	3	ENG124	
ENG227	Writing for the Media	3	ENG124	
ENG228	Writing for the Web	3	ENG124	
ENG229	Grant Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG232	Scriptwriting	3	ENG124 **and** ENG227	
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours minimum***				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity **(required)**	3		
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY124	Psychology Of Work	3		
PSY221	Abnormal Psychology	3	PSY121	
SOC122	Society and Technology	3		

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ARTS & HUMANITIES: ***12 credit hours minimum***				
PHL122	Ethics	3		
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: ***7 credit hours minimum (1 lab course required)***				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO 141	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org. and Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org. and Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	

^ Based on SSC placement scores.

++Minimum grade of "C" required.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
Mathematics: *3 credit hours minimum*				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) & MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
ADDITIONAL ELECTIVES IN COMPOSITION TO COMPLETE DEGREE		**15**		
	TOTAL CREDIT HOURS *(60 credits minimum)*	**62-67**		

ASSOCIATE OF ARTS IN ENGLISH COMPOSITION ELECTIVES

The Associate of Arts in English Degree requires **a minimum of 60 credit hours**. Students should choose elective courses from the list below, select additional courses from the previous page, or receive approval from the department chair for other related electives. Students are responsible for knowing and following all pre-requisites for the courses below. Please see your academic advisor for assistance with course selection.

ADDITIONAL ELECTIVES				
ENG125	Technical Editing and Layout	3	ENG124	
ENG126	Technical Grammar and Style	3	ENG124	
ENG222	Health Information Writing	3	ENG124 **and** HIT223	
COM121	Effective Speaking	3		
SPN100	Elementary Spanish I	4		
SPN200	Elementary Spanish II	4		
CHN100	Elementary Chinese I	4		
CHN200	Elementary Chinese II	4		

^Based on SSC placement scores.
++Minimum grade of "C" required.

7201

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

ENGLISH COMPOSITION

Effective Summer 2014

First Semester		Credit Hours	Pre-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^ **(required)**	3	
Mathematics Elective [1]		3-5	*Check for Pre-requisite*
Arts & Humanities Elective [2]		3	*Check for Pre-requisite*
Social & Behavioral Science Elective [3]		3	*Check for Pre-requisite*
		16-18	
Second Semester			
ENG231	College Composition II **(required)**	3	ENG124
SOC225	Cultural Diversity **(required)**	3	
Natural & Physical Sciences Elective ⅄ [4]		3-5	*Check for Pre-requisite*
Arts & Humanities Elective [2]		3	*Check for Pre-requisite*
Composition Elective [5]		3	*Check for Pre-requisite*
		15-17	
Third Semester			
Arts & Humanities Elective [2]		3	*Check for Pre-requisite*
Natural & Physical Sciences Elective ⅄ [4]		4-5	*Check for Pre-requisite*
Social & Behavioral Science Elective [3]		3	*Check for Pre-requisite*
Composition Elective [5]		3	*Check for Pre-requisite*
Additional Composition Elective [6]		3-4	*Check for Pre-requisite*
		16-17	
Fourth Semester			
Arts & Humanities Elective [2]		3	*Check for Pre-requisite*
Additional Composition Elective [6]		3	*Check for Pre-requisite*
Additional Composition Elective [6]		3-4	*Check for Pre-requisite*
Additional Composition Elective [6]		3-4	*Check for Pre-requisite*
Additional Composition Elective [6]		3-4	*Check for Pre-requisite*
		15-18	
TOTAL CREDITS		**62-70**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Mathematics Elective: MTH124, MTH125, MTH130, MTH135, MTH221, MTH223

[2] Arts & Humanities Electives: PHL122, ENG233, ENG234, ENG236, ENG237, HIS121, HIS122

[3] Social & Behavioral Science Electives: PSC121, PSY121, SOC121, PSY122, PSY123, PSY124, PSY221, SOC122, SOC123, SOC221, BUS122, BUS221, BUS222

[4] Natural & Physical Sciences Electives: BIO121, BIO122, BIO124, BIO125, BIO126, BIO127, BIO141, BIO142, BIO221, CHM101, CHM121, CHM122, CHM141, CHM142, PHY101, PHY121, PHY122, PHY125

[5] Composition Elective: ENG238, ENG221, ENG227, ENG2228, ENG229, ENG230, ENG232

[6] Additional Composition Electives: ENG125, ENG126, ENG222, COM121, ENG238, ENG221, ENG227, ENG228, ENG229, ENG230, ENG232, SPN100, SPN200, CHN100, CHN200

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7200

ENGLISH – LITERATURE MAJOR

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
COMPUTER APPLICATIONS				
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency	
ENGLISH COMPOSITION: ***6 credit hours required***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG231	College Composition II **(required)**	3	ENG124	
LITERATURE ELECTIVES: ***6 credit hours minimum***				
ENG235	Introduction to Shakespeare	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
ENG241	Major Modern Writers	3	ENG124	
ENG240	Women's Literature	3	ENG124	
ENG239	Film Appreciation	3	ENG124	
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours minimum***				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY124	Psychology Of Work	3		
PSY221	Abnormal Psychology	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity **(required)**	3		
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ARTS & HUMANITIES: ***12 credit hours minimum***				
PHL122	Ethics	3		
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: ***7 credit hours minimum (1 lab course required)***				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org. and Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org. and Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 **and** MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
Mathematics: ***3 credit hours minimum***				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	

^ Based on SSC placement scores.
++Requires a grade of C or better.
⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
ADDITIONAL ELECTIVES IN COMPOSITION OR LITERATURE TO COMPLETE DEGREE		**15**		
	TOTAL CREDIT HOURS *(60 hours minimum)*	**62-67**		

ASSOCIATE OF ARTS IN ENGLISH LITERATURE ELECTIVES

The Associate of Arts in English Literature Degree requires **a minimum of 60 credit hours**. Students should choose elective courses from the list below, select additional courses from the previous page, or receive approval from the department chair for other related electives. Students are responsible for knowing and following all pre-requisites for the courses below. Please see your academic advisor for assistance with course selection.

ADDITIONAL ELECTIVES				
ENG125	Technical Editing and Layout	3	ENG124	
ENG126	Technical Grammar and Style	3	ENG124	
ENG222	Health Information Writing	3	ENG124 **and** HIT223	
ENG227	Writing for Media	3	ENG124	
ENG228	Writing for the Web	3	ENG124	
ENG229	Grant Writing	3	ENG124	
COM121	Effective Speaking	3		
SPN100	Elementary Spanish I	4		
SPN200	Elementary Spanish II	4		
CHN100	Elementary Chinese I	4		
CHN200	Elementary Chinese II	4		

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

ENGLISH – LITERATURE MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency
Mathematics Elective [1]		3-5	*Check for Pre-requisite*
Arts & Humanities Elective [2]		3	*Check for Pre-requisite*
Social & Behavioral Science Elective [3]		3	*Check for Pre-requisite*
		16-18	
Second Semester			
ENG231	College Composition II **(required)**	3	ENG124
SOC225	Cultural Diversity **(required)**	3	
Natural & Physical Sciences Elective ⅄ [4]		3-5	*Check for Pre-requisite*
Arts & Humanities Elective [2]		3	*Check for Pre-requisite*
Literature Elective [5]		3	*Check for Pre-requisite*
		15-17	
Third Semester			
Arts & Humanities Elective [2]		3	*Check for Pre-requisite*
Natural & Physical Sciences Elective ⅄ [4]		4-5	*Check for Pre-requisite*
Social & Behavioral Science Elective [3]		3	*Check for Pre-requisite*
Literature Elective [5]		3	*Check for Pre-requisite*
Additional Literature Elective [6]		3-4	*Check for Pre-requisite*
		16-18	
Fourth Semester			
Arts & Humanities Elective [2]		3	*Check for Pre-requisite*
Additional Literature Elective [6]		3-4	*Check for Pre-requisite*
Additional Literature Elective [6]		3-4	*Check for Pre-requisite*
Additional Literature Elective [6]		3-4	*Check for Pre-requisite*
Additional Literature Elective [6]		3-4	*Check for Pre-requisite*
		15-19	
	TOTAL CREDITS	**62-72**	

^ Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

++Requires a grade of C or better.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Mathematics Elective: MTH124, MTH125, MTH130, MTH135, MTH221, MTH223

[2] Arts & Humanities Elective: PHL122, ENG233, ENG234, HIS121, HIS122

[3] Social & Behavioral Science Elective: PSC121, PSY121, PSY122, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, BUS122, BUS221, BUS222

[4] Natural & Physical Sciences Elective: BIO121, BIO122, BIO124, BIO125, BIO126, BIO127, BIO141, BIO142, BIO221, CHM101, CHM121, CHM122, CHM141, CHM142, PHY101, PHY121, PHY122, PHY125

[5] Literature Elective: ENG235, ENG236, ENG237, ENG239, ENG240, ENG241

[6] Additional Literature Elective: ENG125, ENG126, ENG222, ENG227, ENG228, ENG229, ENG235, ENG236, ENG237, ENG239, ENG240, ENG241, COM121, SPN100, SPN200, CHN100, CHN200

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF APPLIED SCIENCE

1320

PARALEGAL STUDIES

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PLS121	Introduction to Paralegal Studies^	3	ENG011 **or** Proficiency	
PLS122	Civil Litigation	3	PLS121	
PLS123	Legal Ethics	3	PLS121	
PLS221	Torts and Personal Injury Law	3	PLS122	
PLS222	Family Law	3	PLS121	
PLS223	Property & Probate Law	3	PLS122	
PLS224	Criminal Law and Procedures for the Paralegal	3	PLS121	
PLS227	Paralegal Studies Practicum and Seminar	3	PLS221	
AOT235	Legal Research and Writing	3		
AOT239	Legal Transcription	3	AOT129 **and** AOT130	
AOT237	Legal Office Applications	3	(AOT224 or PLS121) **and** AOT239	
	Total	**33**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
AOT121	Keyboarding/Formatting	3		
AOT129	Keyboarding Skill Building	1	AOT121	
AOT130	Editing, Proofreading, and Language Skills	3		
IRT131	Legal Terminology	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
COM121	Effective Speaking	3		
PSC121	Political Science **(recommended)** [1]	3		
SOC225	Cultural Diversity	3		
BIO126	Science, Energy, & the Environment (lab) (**recommended)** [2]	4		
MTH108	Explorations in Modern Mathematics (**recommended)**^ [3]	3	(MTH091 and MTH092)+ **or** Proficiency	
	Total	**30**		
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement score.

^^To promote student success, this course should be taken in the first semester.

+Minimum grade of "B" required.

[1] Or select one of the following courses: CJS121, PSY121, SOC121, SOC123 *(Check for pre-requisites.)*

[2] Or select one of the following courses: BIO121, BIO127, BIO141, BIO142, CHM101, CHM121, PHY101, PHY125 *(Check for prerequisites.)*

[3] Or select MTH124 *(Recommended for students who plan to pursue a Bachelor's Degree in the future. Check for pre-requisites.)*

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make appointments to meet with their advisors before registering for classes each semester. The student should determine his or her course preferences for the semester prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

PARALEGAL STUDIES

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
AOT121	Keyboarding/Formatting	3	
IRT131	Legal Terminology	3	
PLS121	Introduction to Paralegal Studies^	3	ENG011 **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
SOC225	Cultural Diversity	3	
		16	
Second Semester			
AOT129	Keyboarding/Skill Building	1	AOT121
AOT130	Editing, Proofreading, and Language Skills	3	
AOT235	Legal Research and Writing	3	
PLS122	Civil Litigation	3	PLS121
PLS123	Legal Ethics	3	PLS121
Natural & Physical Sciences Elective [1]		4	*Check for pre-requisites*
		17	
Third Semester			
AOT239	Legal Transcription	3	AOT129 **and** AOT130
AOT237	Legal Office Applications	3	(AOT224 or PLS121) **and** AOT239
PLS221	Torts and Personal Injury Law	3	PLS122
PLS222	Family Law	3	PLS121
COM121	Effective Speaking	3	
		15	
Fourth Semester			
PLS224	Criminal Law and Procedures for the Paralegal	3	PLS121
PLS223	Property & Probate Law	3	PLS122
PLS227	Paralegal Studies Practicum and Seminar	3	PLS221
Social & Behavioral Sciences Elective [2]		3	*Check for pre-requisites*
Mathematics Elective [3]		3	*Check for pre-requisites*
		15	
	TOTAL CREDITS	**63**	

^Based on SSC placement score

^^To promote student success, this course should be taken in the first semester

[1] Natural & Physical Sciences Elective: BIO121, BIO126 **(recommended)**, BIO127, BIO141, BIO142, CHM101, CHM121, PHY101, PHY125

[2] Social & Behavioral Sciences Elective: CJS121, PSC121 **(recommended)**, PSY121, SOC121, SOC123

[3] Mathematics Elective: MTH108 **(recommended)** or MTH124

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF APPLIED SCIENCE

1300

POLICE SCIENCE

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CJS140	Law Enforcement Academy I^++	8	IDS102 **or** Proficiency	
CJS240	Law Enforcement Academy II++	8	CJS140	
CJS121	Introduction to Criminal Justice	3		
CJS221	Criminology	3	CJS121	
CJS227	Criminal Justice Practicum and Seminar	3	CJS221	
TECHNICAL ELECTIVES: ***6 credit hours minimum*** [1]				
ACC235	Forensic Accounting	3		
CFS137	Computer Crime and Investigation	3	NET120 **or** ECA145	
CFS257	File Systems Analysis	3	CFS137 **or** ECA137	
CIS126	Fundamentals of Information Systems	3	ITD122 **or** (ITD105 and ITD106)	
CJS124	Policing	3	CJS121	
HLS121	Introduction to Emergency Management	3		
HLS122	Intelligence and Homeland Security	3		
HLS123	Homeland Defense and Crisis Management	3		
HLS220	Weapons of Mass Destruction	3	HLS123	
HLS225	Intelligence Analysis	3		
IRT131	Legal Terminology	3		
SWK125	Substance Abuse	3		
	Total	**31**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
PHL122	Ethics	3		
BIO125	Medical Terminology	3		
SOC225	Cultural Diversity	3		
	Select two (2) Social & Behavioral Sciences Electives from the list below [2]	6	*Check for pre-requisites*	
	Select one (1) Mathematics Elective from the list below [3]	3	*Check for pre-requisites*	
	Select one (1) Computer Technology Elective from the list below [4]	3	*Check for pre-requisites*	
	Total	**31**		
	Total Credit Hours	**62**		

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester.

++Minimum grade of "C" required.

[1] Technical Electives: ACC235, CFS137, CFS257, CIS126, CJS124, HLS121, HLS122, HLS123, HLS220, HLS225, IRT131, SWK125

[2] Social & Behavioral Sciences Electives: PSC121, PSY121, PSY221, SOC121, SOC123, SOC221, SOC222

[3] Mathematics Elective: MTH108 or MTH124

[4] Computer Technology Elective: ITD122 or NET120

Revised 2/2014

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time students who plan to finish in one year.

POLICE SCIENCE

Effective Summer 2014

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
CJS121	Introduction to Criminal Justice	3	
PHL122	Ethics	3	
Computer Technology Elective [4]		3	*Check for pre-requisites*
Social & Behavioral Sciences Elective [2]		3	*Check for pre-requisites*
		16	
Second Semester			
ENG231	College Composition II	3	ENG124
CJS221	Criminology	3	CJS121
Technical Elective [1]		3	*Check for pre-requisites*
Mathematics Elective [3]		3	*Check for pre-requisites*
Social & Behavioral Sciences Elective [2]		3	*Check for pre-requisites*
		15	
Third Semester			
CJS140	Law Enforcement Academy I^++	8	IDS102 **or** Proficiency
SOC225	Cultural Diversity	3	
COM121	Effective Speaking	3	
Technical Elective [1]		3	*Check for pre-requisites*
		17	
Fourth Semester			
CJS240	Law Enforcement Academy II++	8	CJS140
BIO125	Medical Terminology	3	
CJS227	Criminal Justice Practicum & Seminar	3	CJS221
		14	
	TOTAL CREDITS	**62**	

^Based on SSC placement scores
^^To promote student success, this course should be taken in the first semester.
++Minimum grade of "C" required.
[1] Technical Electives: ACC235, CFS137, CFS257, CIS126, CJS124, HLS121, HLS122, HLS123, HLS220, HLS225, IRT131, SWK125
[2] Social & Behavioral Sciences Electives: PSC121, PSY121, PSY221, SOC121, SOC123, SOC221, SOC222
[3] Mathematics Elective: MTH108 or MTH124
[4] Computer Technology Elective: ITD122 or NET120

Note: Stark State College Police Science program is for individuals interested in pursuing a career in law enforcement. Background checks are completed and submitted to BCI and FBI prior to acceptance into the Ohio Peace Officer Training Academy. Individuals who have been convicted of a felony or domestic violence will not be eligible for the Ohio Peace Officer Training Academy or the Police Science program. All OPOTA instructors are certified by the Ohio Peace Office Training Commission. Students who successfully complete the Ohio Peace Officer Training Academy and pass all practical exercises are eligible to take the Ohio Basic Peace Officer Certification Examination.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ONE-YEAR CERTIFICATE

1302

POLICE SCIENCE (One-Year Certificate)

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CJS140	Law Enforcement Academy I^	8	IDS102 **or** Proficiency	
CJS240	Law Enforcement Academy II	8	CJS140	
CJS121	Introduction to Criminal Justice	3		
CJS221	Criminology	3	CJS121	
	Total	**22**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
	Total	**10**		
	TOTAL CREDIT HOURS	**32**		

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.

Note: Stark State College Police Science program is for individuals interested in pursuing a career in law enforcement. Background checks are completed and submitted to BCI and FBI prior to acceptance into the Ohio Peace Officer Training Academy. Individuals who have been convicted of a felony or domestic violence will not be eligible for the Ohio Peace Officer Training Academy or the Police Science program. All OPOTA instructors are certified by the Ohio Peace Office Training Commission. Students who successfully complete the Ohio Peace Officer Training Academy and pass all practical exercises are eligible to take the Ohio Basic Peace Officer Certification Examination.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time students who plan to finish in one year.

POLICE SCIENCE (One-Year Certificate)

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
CJS140	Law Enforcement Academy I^	8	IDS102 **or** Proficiency
SSC101	Student Success Seminar^^	1	*Take first semester*
CJS121	Introduction to Criminal Justice	3	
COM121	Effective Speaking	3	
		15	
Second Semester			
CJS240	Law Enforcement Academy II	8	CJS140
ENG124	College Composition^	3	ENG011 **or** Proficiency
PSY121	General Psychology^	3	IDS102 **or** Proficiency
CJS221	Criminology	3	CJS121
		17	
	TOTAL CREDITS	**32**	

^Based on SSC placement score.
^^To promote student success, this course should be taken in the first semester.

Note: Stark State College Police Science program is for individuals interested in pursuing a career in law enforcement. Background checks are completed and submitted to BCI and FBI prior to acceptance into the Ohio Peace Officer Training Academy. Individuals who have been convicted of a felony or domestic violence will not be eligible for the Ohio Peace Officer Training Academy or the Police Science program. All OPOTA instructors are certified by the Ohio Peace Office Training Commission. Students who successfully complete the Ohio Peace Officer Training Academy and pass all practical exercises are eligible to take the Ohio Basic Peace Officer Certification Examination.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF ARTS

7210

PSYCHOLOGY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
COMPUTER APPLICATIONS				
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency	
WRITTEN & ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
COM123	Intergroup Communication	3	ENG124	
BEHAVIORAL SCIENCES: ***21 credit hours required***				
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY123	Human Growth & Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY220	Social Psychology	3	PSY 121	
PSY221	Abnormal Psychology	3	PSY121	
PSY222	Psychological Aspects of Therapy^	3	IDS102 **or** Proficiency	
PSY229	Psychological Methods	3	PSY123 **and** PSY220 **and** PSY221 **and** PSY222	
SOCIAL SCIENCES: ***6 credit hours minimum***				
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
SOC225	Cultural Diversity **(required)**	3		
ELECTIVES: ***3 credit hours minimum***				
PSY122	Psychology of Adjustment	3	PSY121	
PSY125	Child Development	3		
COM 223	Interviewing	3	COM122	
SWK125	Substance Abuse	3		
GER121	Gerontology	3		

^ Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ARTS & HUMANITIES: ***12 credit hours minimum***				
PHL122	Ethics **(required)**	3		
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: ***7 semester credit hours minimum (1 lab course required)***				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., & Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
Mathematics**:** ***3 semester credit hours required***				
MTH124	Statistics^ **(required)**	3	(MTH093 and MTH094)++ **or** Proficiency	
	TOTAL CREDITS HOURS	**62-65**		

^Based on SSC placement scores.

++Minimum grade of "C" required.

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit

Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

PSYCHOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency
PHL122	Ethics **(required)**	3	
PSY121	General Psychology^	3	IDS102 **or** Proficiency
Social Science Elective [5]		3	Check for Pre-requisite
		16	
Second Semester			
Arts & Humanities Elective [1]		3	Check for Pre-requisite
Mathematics Requirement [2]		3	Check for Pre-requisite
Natural & Physical Science Elective ⅄ [3]		4-5	Check for Pre-requisite
PSY123	Human Growth & Development	3	PSY121
PSY220	Social Psychology	3	PSY121
		16-17	
Third Semester			
Natural & Physical Science Elective ⅄ [3]		3-5	Check for Pre-requisite
Arts & Humanities Elective [1]		3	Check for Pre-requisite
SOC225	Cultural Diversity **(required)**	3	
PSY221	Abnormal Psychology	3	PSY121
PSY222	Psychological Aspects of Therapy^	3	IDS 102 **or** Proficiency
		15-17	
Fourth Semester			
Arts & Humanities Elective [1]		3	Check for Pre-requisite
Written & Oral Communication Elective [4]		3	Check for Pre-requisite
PSY124	Psychology of Work	3	
Elective [6]		3	Check for Pre-requisite
PSY229	Psychological Methods	3	Check for Pre-requisite
		15	
	TOTAL CREDITS	**62-65**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122

[2] Mathematics Requirement: MTH124

[3] Natural & Physical Science Elective: BIO121, BIO122, BIO124, BIO125, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, BIO221, CHM101, CHM121, CHM141, CHM142, PHY101, PHY121, PHY122, PHY125

[4] Written & Oral Communication Elective: ENG221, ENG230, ENG231, COM121, COM122, COM123

[5] Social Science Elective: SOC121, SOC123, SOC221

[6] Elective: PSY122, PSY125, COM223, SWK125, GER121

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF APPLIED SCIENCE

1200

TECHNICAL COMMUNICATIONS

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
ENG125	Technical Editing and Layout	3	ENG124	
ENG126	Technical Grammar and Style	3	ENG124	
ENG221	Technical Report Writing	3	ENG124	
COM223	Interviewing I	3	COM122	
ENG250	Technical Communications Internship	3	*Completed final semester*	
ENG227	Writing for Media	3	ENG124	
ENG228	Writing for the Web	3	ENG124	
ENG229	Grant Writing	3	ENG124	
TECHNICAL ELECTIVES: ***6 credit hours minimum***				
WDD122	Web Graphic Design	3	WDD121	
WDD121	Internet/Intranet Design & Development^	3	IDS101 **or** Proficiency	
AOT128	DPT-Microsoft Publisher	3	ITD122 **and** IMT122	
AOT235	Legal Research and Writing	3		
IMT121	Interactive Media	3		
IMT122	Graphic Arts Design	3		
	Total	**33**		

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Freshman Experience				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
Composition: ***6 credits hours required***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG231	College Composition II **(required)**	3	ENG124	
Arts & Humanities: ***3 credits hours minimum***				
PHL122	Ethics	3		
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
Mathematics: ***3 credits hours minimum***				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH130	Trigonometry	3	MTH125	

^Based upon SSC placement score.
^^ To promote student success, this course should be taken in the first semester.
++Minimum grade of "C" required.

Revised 2/2014

NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytical Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
Social Sciences: ***6 credit hours minimum***				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC123	Dynamics of the Family	3		
PSY122	Psychology of Adjustment	3	PSY121	
PSY123	Human Growth & Development	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
BUS122	Basic Economics^	3	IDS 102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS 102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS 102 **or** Proficiency	
Basic Sciences: ***7 credit hours minimum***				
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO126	Science, Energy & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., & Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and (**IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY 121	
Communication: ***6 credit hours minimum***				
COM121	Effective Speaking	3		
COM122	Interpersonal Communication **(required)**	3		
COM123	Small Group Communication	3	ENG124	
COM125	Introduction to Communication Theory^	3	IDS102 **or** Proficiency	
	Total	**32**		
	TOTAL CREDIT HOURS	**65-69**		

^Based upon SSC placement score.
++Minimum grade of "C" required.
⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

TECHNICAL COMMUNICATIONS

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-Requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*
ENG124	College Composition^	3	ENG011 **or** Proficiency
COM122	Interpersonal Communication	3	
Communication Elective [6]		3	
Mathematics Elective [3]		3-5	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
		16-18	
Second Semester			
ENG231	College Composition II	3	ENG124
Social Science Elective [4]		3	
Basic Science Elective⍋[5]		3-4	
ENG221	Technical Report Writing	3	ENG124
ENG227	Writing for Media	3	ENG124
Technical Elective [1]		3	
		18-19	
Third Semester			
ENG125	Technical Editing and Layout	3	ENG124
ENG126	Technical Grammar and Style	3	ENG124
COM223	Interviewing I	3	COM122
Basic Science Elective⍋[5]		3-4	
Arts & Humanities Elective [2]		3	
		16-17	
Fourth Semester			
ENG228	Writing for the Web	3	ENG124
ENG229	Grant Writing	3	ENG124
ENG250	Technical Communications Internship	3	
Social Science Elective [4]		3	
Technical Elective [1]		3	
		15	
	TOTAL CREDITS	**65-69**	

^Based upon SSC placement score

^^ To promote student success, this course should be taken in the first semester

⍋Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Technical Electives: Select from WDD121, WDD122, AOT128, AOT235, IMT121, IMT122

[2] Arts & Humanities Elective: PHL122, ENG233, ENG234, ENG236, ENG237, HIS121, HIS122

[3] Mathematics Elective: MTH124, MTH125, MTH130, MTH135, MTH221, MTH223

[4] Social Sciences Electives: PSC121, PSY121, SOC121, SOC123, PSY122, PSY123, PSY221, BUS122, BUS221, BUS222

[5] Basic Sciences Electives: BIO101, BIO121, BIO122, BIO126, BIO127, CHM101, CHM121, CHM122, PHY101, PHY121, PHY122

[6] Communication Electives: COM121, COM122, COM123, COM125

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

CAREER ENHANCEMENT CERTIFICATE

1201

ENGLISH – TECHNICAL COMMUNICATIONS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG125	Technical Editing and Layout	3	ENG124	
ENG227	Writing for Media	3	ENG124	
COM223	Interviewing I	3	COM122	
	TOTAL CREDIT HOURS	**18**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ENG124	College Composition^	3	ENG011 **or** Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency
COM223	Interviewing I	3	COM122
		9	
Second Semester			
ENG221	Technical Report Writing	3	ENG124
ENG125	Technical Editing and Layout	3	ENG124
ENG227	Writing for Media	3	ENG124
		9	
	TOTAL CREDITS	**18**	

^ Based upon SSC placement score.

Revised 2/2014

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

CAREER ENHANCEMENT CERTIFICATE

1202

HEALTH COMMUNICATION

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
COM122	Interpersonal Communication	3		
BIO125	Medical Terminology	3		
ENG124	College Composition^	3	ENG011 **or** Proficiency	
SOC225	Cultural Diversity	3		
ENG221	Technical Report Writing	3	ENG124	
COM228	Nonverbal Communication^	3	IDS102 **or** Proficiency	
COM229	Persuasion^	3	IDS102 **or** Proficiency	
COM127	Health Communication^	3	IDS102 **or** Proficiency	
	TOTAL CREDIT HOURS	**24**		

^Based upon SSC placement score.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

HEALTH COMMUNICATION

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
COM122	Interpersonal Communication	3	
BIO125	Medical Terminology	3	
		6	
Second Semester			
ENG124	College Composition^	3	ENG011 **or** Proficiency
SOC225	Cultural Diversity	3	
		6	
Third Semester			
ENG221	Technical Report Writing	3	ENG124
COM228	Nonverbal Communication^	3	IDS102 **or** Proficiency
		6	
Fourth Semester			
COM229	Persuasion^	3	IDS102 **or** Proficiency
COM127	Health Communication^	3	IDS102 **or** Proficiency
		6	
	TOTAL CREDITS	**24**	

^Based upon SSC placement score.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

1203

CAREER ENHANCEMENT CERTIFICATE

GRANT WRITING

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG231	College Composition II	3	ENG124	
ENG221	Technical Report Writing	3	ENG124	
ENG229	Grant Writing	3	ENG124	
ENG126	Technical Grammar and Style	3	ENG124	
	TOTAL CREDIT HOURS	**15**		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester		Credit Hours	Pre- and Co-requisites
ENG124	College Composition^	**3**	ENG011 **or** Proficiency
Second Semester			
ENG221	Technical Report Writing	3	ENG124
ENG231	College Composition II	3	ENG124
ENG126	Technical Grammar and Style	3	ENG124
		9	
Third Semester			
ENG229	Grant Writing	**3**	ENG124
	TOTAL CREDITS	**15**	

^Based upon SSC placement score.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

CAREER ENHANCEMENT CERTIFICATE

1304

POLICE SCIENCE

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CJS140	Law Enforcement Academy I^	8	IDS102 **or** Proficiency	
CJS240	Law Enforcement Academy II	8	CJS140	
	TOTAL CREDIT HOURS	**16**		

^ Based upon SSC placement score.

Note: Stark State College's Police Science Career Enhancement Certificate is for individuals interested in pursuing a career in law enforcement. This is an intensive, two-semester program.

Background checks are completed and submitted to BCI and FBI prior to acceptance into the Police Science certificate program. Individuals who have been convicted of a felony, domestic violence, or drug convictions will not be eligible for the Police Science program. Application packets are available through the Education, Liberal Arts, and Mathematics Division.

All instructors are certified by the Ohio Peace Office Training Commission. Individuals who successfully complete the Police Science Career Enhancement Certificate program and pass the practical exercises are eligible to take the state (Ohio Basic Peace Officer Certification) examination.

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

POLICE SCIENCE

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
CJS140	Law Enforcement Academy I^	8	IDS102 or Proficiency
		8	
Second Semester			
CJS240	Law Enforcement Academy II	8	CJS140
		8	
	TOTAL CREDITS	**16**	

^ Based upon SSC placement score.

Note: Stark State College's Police Science Career Enhancement Certificate is for individuals interested in pursuing a career in law enforcement. This is an intensive, two-semester program.

Background checks are completed and submitted to BCI and FBI prior to acceptance into the Police Science certificate program. Individuals who have been convicted of a felony, domestic violence, or drug convictions will not be eligible for the Police Science program. Application packets are available through the Education, Liberal Arts, and Mathematics Division.

All instructors are certified by the Ohio Peace Office Training Commission. Individuals who successfully complete the Police Science Career Enhancement Certificate program and pass the practical exercises are eligible to take the state (Ohio Basic Peace Officer Certification) examination.

MATHEMATICS

In an effort to meet the needs of students, courses required in each of the programs are scheduled in sequence to accommodate those attending on a full-time or part-time basis. All students should consult their academic advisors to plan their schedules and course sequence appropriately. In order to keep pace with progress, the College reserves the right to change fees, academic programs, course descriptions, or any other statements, contained in this catalog at the discretion of the College or its Board of Trustees.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF SCIENCE

7500

MATHEMATICS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
WRITTEN & ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM122	Interpersonal Communication	3		
COM123	Small Group Communication	3	ENG124	
COM125	Introduction to Communication Theory^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours minimum***				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity **(required)**	3		
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ARTS & HUMANITIES: ***9 credit hours minimum***				
ENG233	British Literature I: Med to 1785	3	ENG124	
ENG234	British Literature II: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
NATURAL & PHYSICAL SCIENCES: ***8 credit hours minimum (1 lab course required)***				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO129	Meteorology (lab)	3		

^ Based upon SSC placement score.

^^ To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., & Bio Chemistry I (lab)⅄	4	HS CHM **or** CHM101	
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	HS CHM **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY221	General Physics I with Calculus (lab)	5	MTH223 **and** Co-MTH224	
PHY222	General Physics II with Calculus (lab)	5	MTH224 **and** Co-MTH225	
CORE MATHEMATICS & DATA ANALYSIS COURSES: ***21 credit hours minimum***				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^* **(required)**	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytic Geometry and Calculus II **(required)**	4	MTH223	
MTH225	Analytic Geometry and Calculus III **(required)**	4	MTH224	
MTH226	Linear Algebra **(required)**	3	MTH224	
MTH227	Ordinary Differential Equations **(required)**	3	MTH224	
ADDITIONAL ELECTIVES FROM THIS SHEET TO COMPLETE DEGREE [6]		**6**		
	TOTAL CREDIT HOURS	**60-66**		

^Based upon SSC placement score.

++Minimum grade of "C" required.

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Students who do not test into Analytic Geometry and Calculus I will have to take either MTH135 or (MTH125 and MTH130) to satisfy the Analytic Geometry and Calculus I prerequisite. This will add an additional 5-7 credit hours to the degree total.

[6] Additional Electives: Any courses listed on this sheet not already being used to fulfill another requirement.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MATHEMATICS

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH223	Analytic Geometry & Calculus I ^*	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
Natural & Physical Sciences Elective ⅄ [1]		3-5	
Arts & Humanities Elective [5]		3	
		14-16	
Second Semester			
MTH224	Analytic Geometry & Calculus II	4	MTH223
SOC225	Cultural Diversity	3	
Natural & Physical Sciences Elective ⅄ [1]		3-5	
Written & Oral Communication Elective [4]		3	
		13-15	
Third Semester			
MTH225	Analytic Geometry & Calculus III	4	MTH224
MTH226	Linear Algebra	3	MTH224
Additional Elective [6]		3-5	
Social & Behavioral Sciences Elective [2]		3	
Arts & Humanities Elective [5]		3	
		16-18	
Fourth Semester			
MTH227	Ordinary Differential Equations	3	MTH224
Mathematics Requirement [3]		3	
Additional Elective [6]		3-5	
Social & Behavioral Sciences Elective [2]		3	
Arts & Humanities Elective [5]		3	
		15-17	
	TOTAL CREDITS	**60-66**	

^ Based upon SSC placement score.
^^ To promote student success, this course should be taken in the first semester.
⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
*Students who do not test into Analytic Geometry and Calculus I will have to take either MTH135 or (MTH125 and MTH130) to satisfy the Analytic Geometry and Calculus I prerequisite. This will add an additional 5-7 credit hours to the degree total.
[1] Natural & Physical Science Electives: BIO121, BIO122, BIO124, BIO126, BIO127, BIO129, BIO141, BIO142, BIO221, CHM101, CHM121, CHM122, CHM141, CHM142, PHY101, PHY121, PHY122, PHY125, PHY221, PHY222
[2] Social & Behavioral Sciences Electives: Select from PSC121, PSY121, SOC121, BUS122, BUS221, BUS222
[3] Mathematics Requirement: MTH124
[4] Written & Oral Communication Elective: COM122, COM123, COM125, COM121, ENG221, ENG230, ENG231
[5] Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122
[6] Additional Electives: Any courses listed on this sheet not already being used to fulfill another requirement.

EDUCATION, LIBERAL ARTS, AND MATHEMATICS DIVISION

ASSOCIATE OF SCIENCE

7501

MATHEMATICS – PRE-ACTUARIAL MATHEMATICS MAJOR

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
WRITTEN & ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM122	Interpersonal Communication	3		
COM123	Small Group Communication	3	ENG124	
COM125	Introduction to Communication Theory^	3	IDS102 **or** Proficiency	
COM121	Effective Speaking	3		
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours required***				
SOC225	Cultural Diversity	3		
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ARTS & HUMANITIES: ***9 credit hours minimum***				
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
NATURAL & PHYSICAL SCIENCES: ***8 credit hours minimum (1 lab course required)***				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO129	Meteorology (lab)	3		
BIO141	General Biology I (lab)	4		

^ Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM101	Introduction to Chemistry^⅄	4	MTH123 **or** Proficiency	
CHM121	Gen., Org., and Bio Chemistry I (lab)⅄	4	HS CHM **or** CHM101	
CHM122	Gen., Org., and Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY221	General Physics I with Calculus (lab)	5	MTH223 **and** Co-MTH224	
PHY222	General Physics II with Calculus (lab)	5	MTH224 **and** Co-MTH225	
CORE MATHEMATICS & DATA ANALYSIS COURSES: ***29 credit hours minimum***				
BUS124	Business Analysis with Algebra **(required)**	4		
ACC132	Financial Accounting **(required)**	4	BUS124	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^* **(required)**	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytic Geometry and Calculus II **(required)**	4	MTH223	
MTH225	Analytic Geometry and Calculus III **(required)**	4	MTH224	
MTH226	Linear Algebra **(required)**	3	MTH224	
MTH227	Ordinary Differential Equations **(required)**	3	MTH224	
	TOTAL CREDIT HOURS	**62-64**		

^ Based upon SSC placement score.

++Minimum grade of "C" required.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Students who do not test into Analytic Geometry and Calculus I will have to take either MTH135 or (MTH125 and MTH130) to satisfy the Analytic Geometry and Calculus I prerequisite. This will add an additional 5-7 credit hours to the degree total.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

MATHEMATICS – PRE-ACTURIAL MATHEMATICS MAJOR

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
MTH223	Analytic Geometry and Calculus I^*	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
ENG124	College Composition^	3	ENG011 **or** Proficiency
BUS124	Business Analysis with Algebra	4	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
		15	
Second Semester			
MTH224	Analytic Geometry and Calculus II	4	MTH223
ACC132	Financial Accounting	4	BUS124
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency
Arts & Humanities Elective [4]		3	
Written & Oral Communication Elective [2]		3	
		17	
Third Semester			
MTH225	Analytic Geometry and Calculus III	4	MTH224
MTH226	Linear Algebra	3	MTH224
Natural & Physical Sciences Elective ⅄ [1]		3-5	
Arts & Humanities Elective [4]		3	
		13-15	
Fourth Semester			
MTH227	Ordinary Differential Equations	3	MTH224
Mathematics Elective [3]			3
SOC225	Cultural Diversity	3	
Natural & Physical Sciences Elective ⅄ [1]		3-5	
Arts & Humanities Elective [4]		3	
		15-17	
	TOTAL CREDITS	**62-64**	

^Based upon SSC placement score.

^^To promote student success, this course should be taken in the first semester.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Students who do not test into Analytic Geometry and Calculus I will have to take either MTH135 or (MTH125 and MTH130) to satisfy the Analytic Geometry and Calculus I prerequisite. This will add an additional 5-7 credit hours to the degree total.

[1] Natural & Physical Sciences Electives: BIO121, BIO122, BIO124, BIO126, BIO127, BIO129, BIO141, BIO142, BIO221, CHM101, CHM121, CHM122, CHM141, CHM142, PHY101, PHY121, PHY122, PHY125, PHY221, PHY222

[2] Written & Oral Communication Elective: ENG221, ENG230, ENG231, COM122, COM123, COM125, COM121

[3] Mathematics Requirement: MTH124

[4] Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

SCIENCES

In an effort to meet the needs of students, courses required in each of the programs are scheduled in sequence to accommodate those attending on a full-time or part-time basis. All students should consult their academic advisors to plan their schedules and course sequence appropriately. In order to keep pace with progress, the College reserves the right to change fees, academic programs, course descriptions, or any other statements, contained in this catalog at the discretion of the College or its Board of Trustees.

SCIENCES DIVISION
ASSOCIATE OF SCIENCE

7050

**DUAL ASSOCIATE OF SCIENCE DEGREE PROGRAM WITH KSU STARK*

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
WRITTEN & ORAL COMMUNICATION: ***9 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
COM123	Small Group Communication	3	ENG124	
SOCIAL & BEHAVIORAL SCIENCES				
Social Science: ***6 credit hours minimum***				
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC122	Society & Technology	3		
SOC225	Cultural Diversity (**required**)	3		
Choose: ***3 credit hours minimum***				
PSY122	Psychology of Adjustment	3		
PSY123	Human Growth & Development	3	PSY121	
PSY124	Psychology of Work	3		
PSY221	Abnormal Psychology	3	PSY121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
PSC121	Political Science	3		
ARTS & HUMANITIES				
Arts: ***3 credit hours minimum***				
*ARCH 1001	Understanding Architecture	3		
*ART 12001	Art Survey	3		
*ART 22006	Art History I	3		
(Or choose a core course from KSU Fine Arts list.)				

^ Based on SSC placement scores.

**** Notes: Students must take a minimum of 15 hours at Kent State University Stark Campus and 15 hours at Stark State College and maintain a minimum GPA of 2.0 overall at both Kent State University Stark Campus and Stark State College***

Students wishing to transfer to Kent State University for a baccalaureate degree completion through the College of Arts and Sciences are advised to visit http://www.kent.edu/gps/index.cfm for details on specific majors and their requirements.

Revised 2/2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Humanities: ***6 credit hours minimum***				
PHL122	Ethics	3		
*ENG 21054	Introduction to Shakespeare	3		
*ENG 23079	Major Modern Writers	3		
*ENG 22071	Great Books I	3		
*HIST 11050	History of Civilization I	3		
*HIST 11051	History of Civilization II	3		
*HIST 12070	U.S. Formative Period	3		
*HIST 12071	U.S. Modern Period	3		
*MUS 22111	The Understanding of Music	3		
*PAS 23001	Black Experience I	3		
(Or choose a core course from KSU Humanities list.)				
SCIENCES & MATHEMATICS				
Natural & Physical Sciences: ***8 credit hours minimum***				
BIO121	Anatomy and Physiology I (lab)⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4	BIO141	
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM121	Gen., Org., & Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
Mathematics: 8 ***credit hours minimum***				
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
ADDITIONAL ELECTIVES TO COMPLETE DEGREE		**19**		
TOTAL CREDIT HOURS *(60 hrs. minimum)*		**62-66**		

^Based on SSC placement scores.

++Requires a grade of "C" or better.

⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

SCIENCES DIVISION
ASSOCIATE OF SCIENCE

7106

ASSOCIATE OF SCIENCE – GENERAL

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
COMPUTER APPLICATIONS				
ITD122	Computer Applications for Professionals^ **(required)**	3	ITD100 **or** Proficiency	
WRITTEN & ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^ (**required**)	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
COM123	Small Group Communication	3	ENG124	
COM125	Introduction to Communication Theory^	3	IDS102 **or** Proficiency	
SOCIAL & BEHAVIORAL SCIENCES: ***9 credit hours minimum***				
PSC121	Political Science	3		
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY122	Psychology of Adjustment	3		
PSY123	Human Growth & Development	3	PSY121	
PSY124	Psychology of Work	3		
PSY220	Social Psychology	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ARTS & HUMANITIES: ***6 credit hours minimum***				
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
SOC225	Cultural Diversity (**required**)	3		
PHL122	Ethics	3		
SCIENCES & MATHEMATICS				
Natural and Physical Sciences: 12 credit hours minimum (1 lab course required)				
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 **or** Proficiency	
BIO121	Anatomy and Physiology I (lab)^⅄	4	BIO101 **or** Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 **or** BIO123	
BIO124	Human Diseases	3	BIO122 **or** BIO123	
BIO125	Medical Terminology	3		
BIO126	Science, Energy, & the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab)	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab)	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO241	General Genetics (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM101	Introduction to Chemistry^⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM121	Gen., Org., & Bio Chemistry I (lab)⅄	4	HS CHM 2 **or** CHM101	
CHM122	Gen., Org., & Bio Chemistry II (lab)	4	CHM121	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
CHM241	Organic Chemistry I (lab)	5	CHM142	
CHM242	Organic Chemistry II (lab)	5	CHM241	
GEO141	Physical Geology (lab)	4		

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PHY101	Principles of Physics (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)	4	MTH135	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY221	General Physics I with Calculus (lab)	5	MTH223 **and** Co-MTH224	
PHY222	General Physics II with Calculus (lab)	5	PHY221 **and** Co-MTH225	
***Mathematics:* 3-5 credit hours minimum**				
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH130	Trigonometry	3	MTH125	
MTH135	Precalculus^– *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH221	Concepts of Calculus^	3	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytic Geometry and Calculus II	4	MTH223	
MTH225	Analytic Geometry and Calculus III	3	MTH224	
MTH226	Linear Algebra	3	MTH224	
MTH227	Ordinary Differential Equations	3	MTH224	
ADDITIONAL ELECTIVES TO COMPLETE DEGREE*		**18-23**		
TOTAL CREDIT HOURS *(60 credit minimum)*		**60-63**		

^ Based on SSC placement scores.

^^ To promote student success, this course should be taken in the first semester.

++Requires a grade of "C" or better.

⍋ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Additional Electives: Chose from previous pages or the additional electives list shown on the next page.

ASSOCIATE OF SCIENCE ELECTIVES

The Associate of Science Degree requires **a minimum of 60 credit hours**. Students should select a minimum of 40 credit hours from the previous pages. They must further choose 20 elective credit hours from the previous pages or the list below. Alternatively, students may seek approval from the department chair for other related electives. Please see your academic advisor for assistance with course selection.

ADDITIONAL ARTS & SCIENCES COURSES	
Biology	**Biotechnology**
BIO123 Principles of Human Structure & Function# (5)	BST120 Introduction to Biotechnology (1)
BIO222 Pharmacology (3)	BST121 Basic Biotech Methods (1)
BIO242 Cell & Molecular Biology (lab) (4)	BST122 Advanced Biotech Methods (3)
ECO241 Ecology (lab) (4)	BST130 Biotech Seminar I (1)
	BST221 Cell & Tissue Culture (2)
Chemistry	BST222 Cellular & Subcellular Separation (4)
CHM243 Biochemistry I (3)	BST225 Biotech Instrumentation (2)
CHM244 Biochemistry II (3)	BST240 Bioinformatics (3)
	BST250 Bioprocesses & Manufacturing (4)
Communications	
COM223 Interviewing (3)	**Computational Science**
	CST120 Computational Science Methods (3)
English	CST121 Modeling & Simulation (3)
ENG125 Technical Editing & Layout (3)	CST221 Computational Biology (4)
ENG222 Medical Technology Report Writing (3)	
ENG227 Writing for Media (3)	**Social and Behavioral Sciences**
ENG228 Writing for the Web (3)	GER121 Introduction to Gerontology (3)
ENG229 Grant Writing (3)	GER122 Psychosocial Aspects of Aging (3)
	PSY125 Child Development (3)
	PSY222 Psychological Aspects of Therapy (3)
	SOC124 US Social Systems (3)
	SOC222 Juvenile Delinquency (3)

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
#BIO121 and BIO122 may be substituted for BIO123.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit
Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree
Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

SCIENCES DIVISION
ASSOCIATE OF SCIENCE

1270

BIOLOGY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
WRITTEN AND ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
SOCIAL & BEHAVIORAL SCIENCES: ***6 credit hours minimum***				
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
ARTS & HUMANITIES: ***6 credit hours minimum***				
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics ***(recommended)***	3		
SOC225	Cultural Diversity **(required)**	3		
MATHEMATICS: ***4 credit hours minimum***				
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.* ***(recommended)***	5	(MTH093 and MTH094)++ **or** Proficiency	

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.

NATURAL AND PHYSICAL SCIENCES: 14 credit hours required				
BIO141	General Biology I (lab)	4		
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
BIOLOGY CORE: ***12 credit hours minimum***				
BIO142	General Biology II (lab) **(required)**	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
BIO241	General Genetics (lab)	4	BIO141	
BIO242	Cell and Molecular Biology (lab)	4	BIO141	
ECO241	Ecology (lab)	4	BIO142	
CONCENTRATION GROUP ELECTIVES: ***Choose from one of the following groups***				
CHM241	Organic Chemistry I (lab)	5	CHM141	
CHM242	Organic Chemistry II (lab)	5	CHM241	
OR				
CHM243	Biochemistry I	3	CHM121 or CHM141	
CHM244	Biochemistry II	3	CHM243	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
OR				
PHY121	College Physics I with Algebra (lab)	4	MTH135	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
CAPSTONE				
SCI273	Special Topics in Science (**required**)	3	*Sophomore in program*	
	TOTAL CREDIT HOURS *(60 credits minimum)*	**60-63**		

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, or those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time students who plan to finish in two years.

Elective Additional Credit
Self-selection of courses and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree
Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

BIOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BIO141	General Biology I (lab)	4	
CHM141	General Chemistry I^ (lab)	5	HS CHM 2 **or** CHM101
Mathematics Elective [4]		4-5	*Check for pre-requisite*
		14-15	
Second Semester			
BIO142	General Biology II (lab)	4	
CHM142	General Chemistry II (lab)	5	CHM141
ENG124	College Composition^	3	ENG011 **or** Proficiency
Social & Behavioral Science Elective [2]		3	*Check for pre-requisite*
		15	
Summer			
Written & Oral Communication Elective [1]		3	
Concentration Group Elective [6]		3-5	
		6-8	
Third Semester			
Biology Core Elective [5]		4	
SOC225	Cultural Diversity	3	
Arts & Humanities Elective [3]		3	*Check for pre-requisite*
Concentration Group Elective [6]		3-5	*Check for pre-requisite*
		13-15	
Fourth Semester			
SCI273	Special Topics in Science	3	*Sophomore in program*
Social & Behavioral Science Elective [2]		3	*Check for pre-requisite*
Biology Core Elective [5]		4	
Concentration Group Elective [6]		3-5	
		13-15	
	TOTAL CREDITS	**60-63**	

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, or those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Written & Oral Communication Elective: ENG221, ENG231, COM121, COM122
[2] Social & Behavioral Sciences Elective: PSY121, SOC121, BUS122
[3] Arts & Humanities Elective: HIS121, HIS122, ENG233, ENG234, ENG236, ENG237, PHL122 *(recommended)*
[4] Mathematics Elective: MTH125 or MTH135 *(recommended)*
[5] Biology Core Electives: BIO221, BIO241, BIO242, ECO241
[6] Concentration Group Electives: (CHM241 and CHM242) or (CHM243, CHM244, MTH124) or (PHY121 and PHY122)

SCIENCES DIVISION
ASSOCIATE OF APPLIED SCIENCE

1150

BIOTECHNOLOGY

Effective Summer 2014

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BST120	Introduction to Biotechnology	1		
BST121	Basic Biotechnology Methods	1		
BST122	Advanced Biotechnology Methods^	3	BST121 **and** (MTH093 and MTH094)++ **or** Proficiency	
BST130	Biotechnology Seminar I	1		
BST221	Cell and Tissue Culture (1st 8-weeks)	2	BST122	
BST222	Cellular and Subcellular Separations	4		
BST225	Biotechnology Instrumentation (2nd 8-weeks)	2	BST122	
BST240	Bioinformatics	3		
BST250	Bioprocess and Manufacturing	4	BST122	
SCI273	Special Topics in Science	3	*Sophomore in program*	
	Total	**24**		
NON-TECH Course Number	**Course Title**	**Credits**	**Pre- and Co-Requisites**	**Completed Sem./Year**
SSC101	Student Success Seminar^^	1	*Take first semester*	
ENG124	College Composition^	3	ENG011 **or** Proficiency	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
BIO141	General Biology I (lab)	4		
BIO242	Cell & Molecular Biology (lab)	4	BIO141	
CHM101	Introduction to Chemistry^ ⅄	4	(MTH093 and MTH094)++ **or** Proficiency	
CHM141	General Chemistry I (lab) ⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
PHL122	Ethics	3		
	Select Two (2) Biology Electives from the list below [1]	8	*Check for pre-requisite*	
	Total	**44**		
	TOTAL CREDIT HOURS	**68**		

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

++Requires a grade of "C" or better.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, or those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Biology Electives: BIO142, BIO221, BIO241

FULL-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

BIOTECHNOLOGY

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
BIO141	General Biology I (lab)	4	
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
CHM101	Introduction to Chemistry^ ⅄	4	(MTH093 and MTH094)++ **or** Proficiency
BST120	Introduction to Biotechnology	1	
BST121	Basic Biotechnology Methods	1	
		15	
Second Semester			
ENG124	College Composition^	3	ENG011 or Proficiency
Biology Elective [1]		4	*Check for pre-requisite*
PHL122	Ethics	3	
BST122	Advanced Biotechnology Methods	3	BST121 **and** (MTH093 and MTH094)++ **or** Proficiency
BST130	Biotechnology Seminar I	1	
		14	
Summer			
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
SCI273	Special Topics in Science	3	*Sophomore in program*
		6	
Third Semester			
BST240	Bioinformatics	3	
BST221	Cell & Tissue Culture (1st 8-weeks)	2	BST122
BST225	Biotechnology Instrumentation (2nd 8-weeks)	2	BST122
BST222	Cellular & Subcellular Separations	4	BST122
CHM141	General Chemistry I (lab) ⅄	5	HS CHM 2 **or** CHM101
		16	
Fourth Semester			
BIO242	Cell and Molecular Biology (lab)	4	BIO141
BST250	Bioprocesses and Manufacturing	4	BST122
CHM142	General Chemistry II (lab)	5	CHM141
Biology Elective [1]		4	*Check for pre-requisite*
		17	
	TOTAL CREDITS	**68**	

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

++Requires a grade of "C" or better.

⅄ Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, or those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

[1] Biology Electives: BIO142, BIO221, BIO241

SCIENCES DIVISION

CAREER ENHANCEMENT CERTIFICATE

1151

BIOTECHNOLOGY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BST120	Introduction to Biotechnology	1		
BST121	Basic Biotechnology Methods	1		
BST122	Advanced Biotechnology Methods	3	BST121 **and** ((MTH093 and MTH094)++ or Proficiency)	
BST130	Biotechnology Seminar I	1		
BIOTECHNOLOGY ELECTIVE: Select one course below*				
BST221	Cell and Tissue Culture	2	BST122	
BST240	Bioinformatics	3		
MATHEMATICS: ***Select one course below***				
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
SCIENCES: ***Select one course below*** **				
BIO141	General Biology I^	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141	
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
	TOTAL CREDIT HOURS	**15-18**		

^ Based upon SSC placement score.
++Minimum grade of "C" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
***Students may elect to take BST221 or BST240 depending on their desired career path.
****Students may elect to take BIO141 or CHM141 depending on their desired career path.

<u>Please see reverse side for Biotechnology specialization tracks.</u>
All courses listed as options are required for the AAS Degree in Biotechnology.

Revised 2/2014

STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

BIOTECHNOLOGY

Effective Summer 2014

GENERAL BIOTECHNOLOGY LAB TECHNICIAN TRACK

First Semester		Credit Hours	Pre- and Co-requisites
BIO141	General Biology I (lab)**		
or	**or**		
CHM141	General Chemistry I (lab)⅄**	4-5	HS CHM 2 **or** CHM101
MTH125	College Algebra^	4	(MTH093 and MTH094)++ **or** Proficiency
BST120	Introduction to Biotechnology	1	
BST121	Basic Biotechnology Methods	1	
		10-11	
Second Semester			
BST122	Advanced Biotechnology Methods	3	BST120 **and** (MTH093 and MTH094)++ **or** Proficiency
BST130	Biotechnology Seminar I	1	
BST240	Bioinformatics*	3	
or	**or**		
Summer Semester			
BST221	Cell and Tissue Culture*	2	BST122
		6-7	
		16-18	

CLINICAL-BASED STERILE TECHNIQUE TRACK

First Semester		Credit Hours	Pre- and Co-requisites
BIO221	Principles of Microbiology (lab)	4	BIO122 **or** BIO123 **or** BIO141
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency
BST120	Introduction to Biotechnology	1	
BST121	Basic Biotechnology Methods	1	
		9	
Second Semester			
BST122	Advanced Biotechnology Methods^	3	BST120 **and** ((MTH093 and MTH094)++ or Proficiency)
BST130	Biotechnology Seminar I	1	
		4	
Summer Semester			
BST221	Cell and Tissue Culture*	2	BST122
		2	
	TOTAL CREDITS	**15**	

^ Based upon SSC placement score.
++Minimum grade of "C" required.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
*****Students may elect to take BST221 or BST240 depending on their desired career path.
******Students may elect to take BIO141 or CHM141 depending on their desired career path.

All courses listed as options are required for the AAS Degree in Biotechnology.

SCIENCES DIVISION

ASSOCIATE OF SCIENCE

1260

CHEMISTRY

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1		
WRITTEN & ORAL COMMUNICATION				
ENG124	College Composition^ **(required)**	3	ENG011 **or** Proficiency	
SOCIAL & BEHAVIORAL SCIENCES: ***6 credit hours minimum***				
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY124	Industrial/Organizational Psychology	3		
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC122	Society and Technology	3		
ARTS & HUMANITIES: ***6 credit hours minimum***				
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics ***(recommended)***	3		
SOC225	Cultural Diversity **(required)**	3		
MATHEMATICS: ***8 credit hours minimum***				
MTH135	Precalculus^ **–** *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytic Geometry and Calculus II	4	MTH223	

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.

NATURAL & PHYSICAL SCIENCES: ***15 credit hours required***				
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
CHM241	Organic Chemistry I (lab)	5	CHM142	
CHEMISTRY CORE				
CHM242	Organic Chemistry II (lab) **(required)**	5	CHM241	
CONCENTRATION GROUP ELECTIVES: ***Choose from one of the following groups***				
PHY121	College Physics I with Algebra (lab)*	4	MTH135 **or** (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)*	4	PHY121	
OR				
PHY221	General Physics I with Calculus (lab)*	5	MTH223 **and** Co-MTH224	
PHY222	General Physics II with Calculus (lab)*	5	PHY221 **and** Co-MTH225	
OR				
CHM243	Biochemistry I	3	CHM121 **or** CHM141	
CHM244	Biochemistry II	3	CHM243	
MTH124	Statistics^	3	(MTH093 and MTH094)++ **or** Proficiency	
ELECTIVES – Select additional courses to complete the total of 60-63 credit hours.				
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
GEO141	Physical Geology (lab)	4		
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
CST222	Computational Chemistry	4	CHM141	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
MTH225	Analytic Geometry and Calculus III**	4	MTH224	
PHY125	Astronomy (lab)^	4	IDS102 **and** (MTH093 and MTH094)++ **or** Proficiency	
SCI273	Special Topics in Science	3	*Sophomore in Program*	
	TOTAL CREDIT HOURS *(60 credits minimum)*	**60-63**		

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
* Students may choose either PHY121 and PHY122 or PHY221 and PHY222 depending on the academic track that they want to pursue. A Bachelor of Science may require two semesters of physics with calculus and a Bachelor of Arts may require two semesters of physics with algebra.
** Required if also taking PHY222.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time students who plan to finish in two years.

Elective Additional Credit
Self-selection of courses and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree
Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

CHEMISTRY
Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CHM141	General Chemistry I (lab) ⅄	5	HS CHM 2 **or** CHM101
SOC225	Cultural Diversity	3	
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH 135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
		17	
Second Semester			
CHM142	General Chemistry II (lab)	5	CHM141
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
Social & Behavioral Sciences Elective [1]		3	*Check for pre-requisite*
Arts & Humanities Elective [2]		3	*Check for pre-requisite*
		15	
Third Semester			
CHM241	Organic Chemistry I (lab)	5	CHM142
MTH224	Analytical Geometry and Calculus II	4	MTH223
Concentration Group Elective [3]		4-5	*Check for pre-requisite*
Social & Behavioral Sciences Elective [1]		3	*Check for pre-requisite*
		16-17	
Fourth Semester			
CHM242	Organic Chemistry II (lab)	5	CHM241
Concentration Group Elective [3]		4-5	*Check for pre-requisite*
MTH225	Analytic Geometry and Calculus III**		MTH224
	or *Additional Elective [4]*	3-4	*Check for pre-requisites*
		12-14	
	TOTAL CREDITS	**60-63**	

^Based on SSC placement scores.
^^To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
**Required if also taking PHY222.
[1] Social & Behavioral Sciences Elective: BUS122, PSY121, PSY124, SOC121, SOC122
[2] Arts & Humanities Elective: Select from ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122 *(recommended)*
[3] Concentration Group Electives: (PHY121 and PHY122) or (PHY221 and PHY222) or (CHM243, CHM244 and MTH124)
[4] Additional Electives: BIO141, BIO142, GEO141, CSE122, CST222, ITD122, PHY125, SCI273

SCIENCES DIVISION
ASSOCIATE OF SCIENCE

7107

PHYSICS

Effective Summer 2014

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester*	
WRITTEN & ORAL COMMUNICATION: ***6 credit hours minimum***				
ENG124	College Composition^	3	ENG011 **or** Proficiency	
ENG221	Technical Report Writing	3	ENG124	
SOCIAL & BEHAVIORAL SCIENCES: 6 ***credit hours minimum***				
PSY121	General Psychology^	3	IDS102 **or** Proficiency	
PSY124	Industrial/Organizational Psychology^	3	IDS102 **or** Proficiency	
PSY220	Social Psychology	3	PSY121	
SOC121	Sociology^	3	IDS102 **or** Proficiency	
SOC122	Society and Technology	3		
PSC121	Political Science	3		
BUS122	Basic Economics^	3	IDS102 **or** Proficiency	
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
BUS222	Macroeconomics^	3	IDS102 **or** Proficiency	
ARTS & HUMANITIES: ***6 credit hours minimum***				
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
SOC225	Cultural Diversity (**required**)	3		
MATHEMATICS: ***8-9 credit hours minimum***				
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094)++ **or** Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytic Geometry and Calculus II	4	MTH223	

^ Based on SSC placement scores.
^^ To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NATURAL & PHYSICAL SCIENCES: ***10 credit hours required***				
CHM141	General Chemistry I (lab)⅄	5	HS CHM 2 **or** CHM101	
CHM142	General Chemistry II (lab)	5	CHM141	
CONCENTRATION CORE: ***18 credit hours required***				
PHY221	General Physics I with Calculus (lab)	5	MTH223 **and** Co-MTH224	
PHY222	General Physics II with Calculus (lab)	5	PHY221 **and** Co-MTH225	
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)	
MTH225	Analytic Geometry and Calculus III	4	MTH224	
CONCENTRATION ELECTIVES – *Select additional courses to complete the total of 60-63 credit hours.*				
MTH226	Linear Algebra	3	MTH224	
MTH227	Ordinary Differential Equations	3	MTH224	
CST120	Computational Science Methods	3	MTH135	
CST121	Modeling & Simulation	3	MTH221 or MTH223	
ITD122	Computer Applications for Professionals^	3	ITD100 **or** Proficiency	
	TOTAL CREDIT HOURS *(60 credits minimum)*	**60-63**		

^Based on SSC placement scores
^^To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
⅄Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence
The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

Elective Additional Credit
Self-selection of course and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit u-select at http://www.transfer.org/uselect to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree
Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

PHYSICS

Effective Summer 2014

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^ **(required)**	1	*Take first semester.*
PHY125	Astronomy (lab)^	4	(MTH093 and MTH094)++ **or** Proficiency **and** (IDS102 or Proficiency)
ENG124	College Composition^	3	ENG011 **or** Proficiency
MTH135	Precalculus^	5	(MTH093 and MTH094)++ **or** Proficiency
SOC225	Cultural Diversity **(required)**	3	
		16	
Second Semester			
CHM141	General Chemistry I (lab) ⅄	5	HS CHM2 **or** CHM101
ENG221	Technical Report Writing	3	ENG124
MTH223	Analytic Geometry and Calculus I^	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
Concentration Elective[3]		3	*Check for pre-requisite*
		15	
Summer Semester			
Arts & Humanities Elective [1]		3	*Check for pre-requisite*
Social & Behavioral Science Elective [2]		3	*Check for pre-requisite*
		6	
Fall Semester			
PHY221	General Physics I with Calculus (lab)	5	MTH223 **and** Co-MTH224
MTH224	Analytic Geometry and Calculus II	4	MTH223
Social & Behavioral Science Elective [2]		3	*Check for Pre-requisite*
		12	
Spring Semester			
MTH225	Analytic Geometry and Calculus III	4	MTH224
PHY222	General Physics II with Calculus (lab)	5	PHY221 **and** Co-MTH225
CHM142	General Chemistry II (lab)	5	CHM141
		14	
	TOTAL CREDITS	**60-63**	

^Based on SSC placement scores
^^To promote student success, this course should be taken in the first semester.
++Requires a grade of "C" or better.
⅄ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.
[1] Arts & Humanities Elective: HIS121, HIS122, ENG233, ENG234, ENG236, ENG237, or PHL122
[2] Social & Behavioral Science Elective: PSY121, PSY124, PSY220, SOC121, SOC122, PSC121, BUS122, BUS221, or BUS222
[3] Concentration Elective: ITD122, CST120, CST121, MTH226, or MTH227

Engineering Tech

Engineering

EET225 DIGITAL COMM AND SYS ANALY

Credit Hours: 3 Contact Hours: 6 Lecture Hours: 0 Lab Hours: 6 Other Hours: 0

The course deals with implementing data acquisition, instrumentation control, data analysis and presentation. Serial and parallel interfaces are used for the instrumentation communication to the networks (internet and intranet). Programming involves using a graphical user interface (GUI).

Pre-reqs:

And EET262 Can be Taken Concurrently

Health and Human Services

Occupational Therapy

OTA122 THERAPEUTIC MEDIA

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Skill development in selected activities, screening and assessments with the emphasis on psychosocial, pediatric and geriatric performance use of equipment, individual and small group teaching, analysis of activities, use of O.T. Frames of Reference and O.T. Frameworks.

Pre-reqs:

OTA121 Can be Taken Concurrently

Information Tech

Computer Security

IMT261 ADVANCED MUSIC TECHNOLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Advanced Music Technology requires students to utilize the skills they have developed throughout the Music Technology and Applied Music Technology classes. Students will refine their skills as music producers and engineers by completing regular homework assignments and four large-scale projects, designed to build professional-standard portfolios.

Pre-reqs:

And IMT246 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH125B COLLEGE ALGEBRA B

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Graphing of polynomial and rational functions, zeros of polynomial functions including the Fundamental Theorem of Algebra, exponential and logarithmic functions including graphs and applications, conic sections, systems of equations using matrices and determinants, matrix algebra, partial fraction decomposition. Ohio Transfer Module Approved effective Summer 2010.

Pre-reqs:

MTH125A

Engineering Tech

Engineering

MET231 FUEL CELL SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers in detail fuel cell stack, fuel processor, power conditioner, heat exchanger and the remainder of subsystems for the fuel cell to function as required. Topics include: interconnect plates, series versus parallel electrical conduction, hydrogen fuel and storage, hydrocarbons and fuel processing, instrumentation and programming, power conditioning of DC and AC, heat transfer, and interfacing with the power grid.

Pre-reqs:

MET230

Business/ Entrepreneurial

Business Mgt/Entrep

MKT227 CONSUMER BEHAVIOR

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides in-depth knowledge of consumer buying behavior. It includes the study of the various cultural, social, personal and psychological factors that influence consumer market behavior and strategy. Upon completion, students should be able to demonstrate an understanding of the factors that influence consumer behavior.

Pre-reqs:

MKT121

Business/ Entrepreneurial

Business Mgt/Entrep

MKT229 MARKET PLANNING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This is a capstone course that focuses on the significant procedures, processes and analysis that leads the student through the comprehensive market planning process. Methodology includes market research, company and industry analysis, and the development of the processes required in the completion and presentation of the market plan. Upon completion, students should be able to demonstrate an understanding of the creation, analysis, and preparation in the completion of the market planning process.

Pre-reqs:

MKT121

Engineering Tech

Engineering/Applied

MST130 ELEMENTS OF MICROPROCESS

Credit Hours: 4 Contact Hours: 3 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

The study of microprocessor system hardware including basic understanding of the software used to control microprocessor systems. Troubleshooting techniques are studied and applied to service any microprocessor system. Meters, oscilloscopes and various probes are used in servicing work.

Pre-reqs:

EST128

MST227 METALLIC INERT GAS WELD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Study of application and use of continuous consumable with electrode application and MIG welding equipment. Properties of gases with regard to flow and regulation in gas metal-arc. Welding techniques are studied in relation to welding steels and non-ferrous materials.

Pre-reqs:

And MST128

Health and Human Services

Physical Therapy

Health and Human Services

Physical Therapy

PTA231 DIRECTED PRACTICE II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 0 Other Hours: 2

Clinical experience in various physical therapy departments under direct supervision. Grading: Credit/Fail

Pre-reqs:

PTA229

Engineering Tech

Engineering

EET233 TECH PROJECT ELECTRICAL

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

A course designed to allow the student to demonstrate capabilities acquired during previous course work in the electrical program. The student will choose an approved project compatible with interest and background. The project may be in the area of controls, machine building, electrical design, or power generation and transmission. The scope will be determined by the project, but in general, will include research, testing, drawing, actual construction, a report and presentation.

Pre-reqs:

EET123

EET235 TECH PROJECT ELECTRONIC

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

Designed to allow the student to exercise the capabilities developed in the Electronic Engineering Technology program. The student will choose an approved project compatible with interest and background. Project may be a design, test or microcomputer-based project. During the project, performance will be verified at given intervals with suitable test procedures.

Pre-reqs:

And EET248

Information Tech

Computer Science

Information Tech

Computer Science

EET261 ADVCD NETWKG AND SECURTY TPC

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Session hijacking, trojans, virii, input validation and other types of attacks are covered in this class. Ghost Mail, NetCat and war dialers will be used as tools to provide counter measures against the computer criminal.

Pre-reqs:

And EET131

Engineering Tech

Engineering/Applied

HVC122 HVAC PRINCIPLES II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An in depth study of the main principles of HVAC. Beginning with safety, topics covered include piping, refrigeration piping, the refrigerant cycle, and refrigerant handling. Also studied are duct sizing and layout, air test and balance, including blower drives and system components. Heating and cooling loads will be discussed. Special attention will be given to electrical wiring and controls and troubleshooting.

Pre-reqs:

HVC121 Can be Taken Concurrently

HVC222 HVAC DESIGN & APPLICATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The student's understanding of heat transfer will be expanded to encompass application. The principles of thermodynamics, psychometrics, and calculating heating and cooling loads are emphasized. Heating, venting and combustion air will be included. Reading plans and specification, systems design, and equipment selection are studied.

Pre-reqs:

HVC122

Engineering Tech

Engineering/Applied

HVC223 HVAC SYS OPER AND TRBLSHT- HT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Heating equipment and system operation and studied together with development of problem solving techniques. Through the use of laboratory demonstrations, measurements, observations and experiments with HVAC systems and components the student learns proper system diagnosis and repair procedures.

Pre-reqs:

HVC122

HVC232 ADVANCED HVAC APP CONTROLS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

HVAC equipment application design concentrating on commercial and light commercial systems is presented. Roof-top units, economizers, water chillers, air handling units and IAQ are covered. Commercial system controls and zone controls including residential zoning are studied.

Pre-reqs:

And HVC227

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

IDS102 CRITICAL ANALYSIS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course teaches vocabulary skills, critical comprehension, and analysis of college-level reading material. The course requires a computerized reading software program.

Pre-reqs:

Or CAL101

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC133 MANAGERIAL ACCOUNTING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

The emphasis in this course is on the use of accounting information as an internal tool for planning and control. Course coverage includes ratios, cost behavior, cost accumulation and reporting, cost-volume-profit analysis, budgeting, and other decision criteria. While primary coverage will be of this material in a manufacturing setting, service and merchandising applications will also be presented. Upon completion of this course, students should be able to apply the fundamental concepts of managerial accounting to a variety of business decisions. TAG approved course- OBU002 effective Fall 2005.

Pre-reqs:

ACC132

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

IDS102 CRITICAL ANALYSIS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course teaches vocabulary skills, critical comprehension, and analysis of college-level reading material. The course requires a computerized reading software program.

Pre-reqs:

Or Test & Score: Compass Reading - 066

Engineering Tech

Engineering

DET122 DESCRIPTIVE GEOMETRY

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course is designed to enable the student to properly visualize any object, regardless of its complexity. The three basic geometric elements (points, lines and surfaces) and their relationships to each other are described in detail.

Pre-reqs:

DET121

Engineering Tech

Engineering

DET124 WORKING DRAWINGS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Course covers threads, welding, fasteners, tolerancing, fits, and basic geometric dimensioning as they relate to detail and assembly drawings. Students are required to complete a set of working drawings that are technically correct and feasible for production. Emphasis is placed on the various components that constitute a well-executed drawing.

Pre-reqs:

DET121

Health and Human Services

Dental Hygiene

DHY125 DENTAL MATERIALS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

Course design covers fundamental knowledge of the dental materials commonly used in contemporary dental practice including their physical, chemical and manipulative characteristics. Skill development in correctly using these materials is emphasized.

Pre-reqs:

DHY131

DHY223 COMMUNITY ORAL HEALTH II

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

Concepts of assessing, planning, implementing and evaluating oral health programs for community groups is presented. This course focuses on program planning models, incorporation of research methods into programs development and evaluation and offers practical application of community health concepts. Field experience required.

Pre-reqs:

And DHY134

Information Tech

Computer Security

Information Tech

Computer Security

IMT237 COMPOSITING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn how to create special effects using the green screen, mattes, alpha channels and masks, using special effects software. Upon completion, students will be able to effectively create special effects in various formats. Students will gain these skills through a series of labs and projects utilizing Adobe After Effects.

Pre-reqs:

IMT223

Educ/ Liberal Arts/ Math

English

ENG240 WOMEN'S LITERATURE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores representative works by women of diverse eras, cultures, historical, social and literary perspectives. Emphasis will be placed on critical reading of the works and techniques used to analyze them, especially in terms of race, ethnicity, class, sexual orientation, and cultural context. Through this analysis, students will gain knowledge and understanding of women's role in the literary tradition and how their roles and views of themselves change and are reflected in their writing.

Pre-reqs:

ENG124

Information Tech

Administrative Srv Off Applion

IRT231 JUDICIAL PROCEDURES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Introduction to the responsibilities of the judicial reporter in the court system and the freelance environment; legal procedures; reporting techniques; and realtime reporting. Instruction in transcript production; court and transcript forms; researching for transcript production; marking and maintaining exhibits; realtime reporting in a deposition and court environment; the profession and related job opportunities; ethics, including the distribution of the NCRA Code of Professional Ethics; and professional associations. Upon completion, students should be able to demonstrate knowledge in all areas of the responsibilities of the judicial reporter.

Pre-reqs:

Or IRT133

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM125 INTRO TO COMMUNICATION THEORY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide students with a survey of the basic elements of communication in a variety of contexts including interpersonal, group, organizational, intercultural, and mass media. Analysis and application of communication theories is emphasized as well as the study of current communication theory research. This course is Ohio TAG approved. OCM001 effective Summer 2008.

Pre-reqs:

Or IDS102

Engineering Tech

Engineering/Applied

AIT137 CAD/CAM

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course is designed to give a student the basic understanding of programming for machining centers and for turning centers, using the latest Computer Aided Design/Computer Manufacturing CNC programming software.

Pre-reqs:

And IET223

MST139 GAS TUNGSTEN ARC WLDG TITAN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course provides the student with the knowledge and skill to weld with the gas tungsten arc welding process on stainless steel and titanium. This course provides the student with the opportunity to develop the manual skills necessary to produce high quality welds on 16 gage and .040 stainless steel and titanium, using DCEN.

Pre-reqs:

MST138

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY222 DENTAL PHARMACOLOGY

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

General principles of drug regulation and prescribing, action and handling and adverse reactions is covered. Body systems, medical histories and their impact on drugs used in dentistry and their potential to alter dental treatment is discussed. Drugs used to manage medical emergencies are emphasized.

Pre-reqs:

BIO221

Sciences

Chemistry

CHM243 BIOCHEMISTRY I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the biochemical mechanisms involved in chemistry of amino acids and proteins, human immune system, catalysis and enzymes, carbohydrate and glycogen metabolism, lipids and biological membranes, and energetics of metabolic reactions.

Pre-reqs:

CHM121

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM127 HEALTH COMMUNICATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to provide an overview of Health Communication through an examination of theoretical frameworks, communication strategies, and technologies that promote the health of individuals, communities, and populations. These various aspects of Health Communication will be analyzed through the lens of various aspects of health care (patient perspective, caregiver perspective, health images in media, etc.) Students will examine these aspects through various subdisciplines of communication (interpersonal, groups/organizations, public relations, media, etc.).

Pre-reqs:

Or Test & Score: ACT Reading - 18

Information Tech

Computer Science

Information Tech

Computer Science

CIS221 GENERATING RPTS DECSN MAKING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides students with exposure to various tools used to connect to databases, retrieve and modify raw data, and then generate various types of reports. Topics will include, but not limited to, the generation of various types of reports and extensive use of pivot tables, calculations, program logic, and SQL statements. Upon completion of this course, students will be able to use a variety of software tools to manipulate data and generate meaningful reports.

Pre-reqs:

Or CPD121

Health and Human Services

Health Information

HIT123 HLTHCRE LEGAL AND ETHICAL ISS

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Legal aspects of health information management practice; overview of judicial system and processes; importance of the health record as a confidential and legal document; practice in the release of information function; record retention and destruction of records are studied; current legal issues, compliance, privacy and security; professional and practice related ethical issues and laws are discussed. TAG approved Spring 2012 OHL021.

Pre-reqs:

Or HIT121 Can be Taken Concurrently

Information Tech

Computer Science

WDD224 ACTIVE SERVER PAGE DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on server side programming with ASP.Net. Students learn to connect to a database, add, update, and delete from the database, create user controls, master pages, XML driven site navigation and login pages. ASP.Net web controls are emphasized. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or CSE122

Information Tech

Computer Science

WDD226 WEB DEV WITH PHP AND MYSQL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn to develop server side scripts with PHP including developing various web applications and connecting to a MySQL database. Additional topics include the development and design of the MySQL database. Upon completion, students will be capable of utilizing PHP to develop web applications and connect to a MySQL database. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA228

WDD230 ADV FLASH ANIMATION AND DES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Learn to develop cartoon characters online and use them in web site marketing. Each aspect of character drawing taken step by step is concluded with developing a complete character. Various animation techniques are applied to the character culminating in a complete animation. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA155

WDD231 FLASH ACTIONSCRIPTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on using Flash for web site creation. The student learns to use actionscripting to interact with Flash, load external data and create complex sites using components. Hans-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA155

Information Tech

Computer Science

WDD125 MICROSOFT EXPRESSION STUDIO

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This class will cover planning your website, setting up a local website in Expression Web, creating your first web page, semantic HTML, beginning CSS using the Expression Web tools and end with a complete website using a Dynamic Web Template.

Pre-reqs:

Or WDD121

WDD225 ADV ACTIVE SVR PAGE DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers advanced topics in the ASP.Net technology from Microsoft. Topics covered will be ADO.net, Converting data back and forth from XML, building custom controls and N-tier development. Several complete applications will be developed.

Pre-reqs:

Or WDD224

Health and Human Services

Medical Lab

MLT122 URINALYSIS AND BODY FLUIDS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

Course is structured to expose the student to the analysis of urine by macroscopic, chemical and microscopic techniques to determine the presence of soluble, insoluble substances and their relationship to disease. The class uses urine specimens, prepared slides and case histories. Course introduces topics of information, composition, and function of synovial, cerebrospinal, serous, amniotic, and seminal fluids. Course will describe the methods used in the routine analysis of these fluids, along with correlation of results with normal and disease states. TAG OHL010 approved Spring 2012.

Pre-reqs:

MLT124

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

IRT122 REALTIME THEORY II

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

Mastery of stenotype machine theory and technique with instruction in writing the spoken word with punctuation by means of a realtime translation theory. Instruction and practice to develop recording, notereading, and typewritten transcription skills, as well as mastery of realtime electronic shorthand in preparation for more advanced courses in the program. Theory instruction will focus on the use of electronic media and/or realtime technology and teacher interaction. Upon completion, students should be able to write the spoken word with punctuation by means of a conflict-free reporting theory as approved by NCRA to provide instantaneous translation.

Pre-reqs:

IRT121

Health and Human Services

Medical Lab

MLT223 CLINICAL MICROBIOLOGY

Credit Hours: 7 Contact Hours: 9 Lecture Hours: 4 Lab Hours: 5 Other Hours: 0

The student will study the morphology and identification of microorganisms commonly found in humans, their relationship to disease states and their susceptibility to antibiotics. Topics include: basic structures and functions of bacteria; culture, growth and development requirements; classification of microbes; infectious disease; control of disease; laboratory safety; unknowns for identification from ATCC (American Type Culture Collection) seeded cultures; videotapes and kodachromes. Other topics include mycology, parasitology and virology.

Pre-reqs:

And MLT126

Information Tech

Computer Security

CFS136 PRINC OF INFORMATION SECURITY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines the current standard of due care and best business practice in information security. Demonstrations and hands-on practice will reinforce topics such as evaluation and selection of security models, risk management, threat analysis, organizational technology evaluation, security implementation, disaster recovery planning and security policy formation and implementation. Upon completion, the students will be able to examine security technology, methodologies and practices.

Pre-reqs:

NET121

Information Tech

Computer Security

CFS257 FILE SYSTEMS ANALYSIS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is a comprehensive overview of contemporary volume and file systems. Topics include, discovering hidden evidence, recovering deleted data, data structures, and tool validation. Students will analyze example disk images, and participate in advanced investigation scenarios.

Pre-reqs:

ECA137

CFS286 UNIX/LINUX FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers typical methods of collecting, examining, and recovering data from typical UNIX style file systems. Methods for imaging and mounting file systems without changing data will be studied. Ways of monitoring system events and tracking intruders.

Pre-reqs:

NET220

Educ/ Liberal Arts/ Math

Mathematics

MTH221 CONCEPTS OF CALCULUS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A study of the theory and techniques of analytic geometry, differential and integral calculus, including variables, functions, limits, differentiation, integration and applications of the derivative and integral.

Pre-reqs:

MTH135

Engineering Tech

Engineering

Engineering Tech

Engineering

CET226 ESTIMATING

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course develops the methods and procedures for preparing construction estimates, both manually and electronically. Topics include excavation, masonry, concrete, steel and carpentry. Emphasis is placed on take-off procedures and pricing, consideration of labor and equipment costs, and overhead and profit. Computer programs will be utilized to establish a construction schedule. The student will do a complete estimate of a building project and prepare a competitive bid for the job.

Pre-reqs:

And MTH125

Or ITD122

Engineering/Applied

ENV234 ASBESTOS ABATEMENT WKR REFRSH

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 0 Lab Hours: 1 Other Hours: 0

This course provides 16 hours of asbestos abatement worker refresher training in which students will review the various types of asbestos and will be provided updates on federal and state regulations pertaining to the removal of asbestos. Students will review proper asbestos removal procedures from ceilings, walls and pipes and how to set up a containment area that will protect the public from asbestos exposures during abatement activities. Students will review self-protection methods from asbestos hazards by the use of respirators, personal protective clothing and HEPA asbestos filtration units. Upon initial and continued approval by the Ohio Department of Health this course will provide the training requirements established by the Ohio Department of Health and the United States EPA to continue to be a licensed asbestos abatement worker in the state of Ohio. Upon successful completion of the course which includes a comprehensive examination, a certificate of completion will be provided to the student.

Pre-reqs:

ENV232

AIT123 ADVANCED MACHINE TOOLS

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

With assigned lab projects, the student will cover advanced machine operations not possible in the beginning course. In-depth coverage of inspection and quality-control precision tools for students with basic knowledge of the trade.

Pre-reqs:

AIT122

Health and Human Services

Health Information

Health and Human Services

Health Information

HIT229 HLTH INFO SYSTEMS AND TECH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Use of information technology in healthcare; computer concepts, communication and network technology; data quality and databases; data security; planning, evaluation and selection of information systems; HIM specialty systems, healthcare information systems; emerging technologies; emphasis on the electronic health record.

Pre-reqs:

And ITD122

Physical Therapy

PTA230 SEMINAR II

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Presentation of diverse clinical issues and approaches to patient management.

Pre-reqs:

PTA224

PTA223 PTA PROCEDURES III

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course will present to the students the impairments, disabilities, functional limitations, and interventions of selected neuromuscular disorders and will include, but not limited to spinal cord injuries, traumatic brain injuries, strokes, and developmental disabilities. Laboratory activities, written assignments, and competencies are required components of this course. Students will perform selected therapeutic interventions under direct PT/PTA supervision as part of the laboratory component of this course.

Pre-reqs:

And PTA225

Sciences

Biology

Sciences

Biology

BST122 ADVANCED BIOTECHNOLOGY METHODS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course expands on the techniques and protocols introduced to the students in BST121. Advanced biotechnology/bioscience techniques such as gel electrophoresis, centrifugation, cellular and molecular sample preparation and handling will be added, while comprehensively reinforcing and strengthening skills in the performance of basic techniques and protocols.

Pre-reqs:

Or Test & Score: ACT Math - 22

Information Tech

Computer Security

NET220 UNIX/LINUX OPERATING ENVIRONMT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers working at the Unix/Linux shell command line, customizing the shell environment, understanding basic filesystem structure and permissions, file management tools, basic shell scripting techniques, vi text editor, data processing tools, Xserver, Xwindows, remote machine access using SSH & FTP, compiling C programs under Unix, and formation of make files and the make command.

Pre-reqs:

Or Test & Score: ACT Math - 22

Health and Human Services

Respiratory Therapy/MIST

RCT220 CARDIOPULMONARY A & P

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An orientation to the anatomy and physiology of the respiratory system and the cardiac system.

Pre-reqs:

RCT126

Information Tech

Computer Science

Information Tech

Computer Science

CSE122 PROGRAMMING LOGIC & PROB SOLV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with structured programming principles through awareness and application of structured programming and object-oriented concepts and techniques. Upon course completion, the student should have an understanding of how to develop the logic to solve a programming solution using structured flowcharts and psuedocode.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Health and Human Services

Respiratory Therapy/MIST

RCT128 CLIN PRACT-AIRW MGT/SEM

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 1 Lab Hours: 0 Other Hours: 7

Clinical experiences are provided in the area of airway management, aerosol therapy, hyperinflation and bronchial hygiene techniques, arterial punctures, and tracheobronchial suctioning. The seminar component consists of pulmonary function testing and quality control.

Pre-reqs:

RCT125

Information Tech

Computer Science

CSE234 ADVANCED C++ PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will complete a collection of hands-on lab exercises to create software using the Visual C++ programming language. Students will take advantage of the object-oriented approach to design, develop and utilize components using the Microsoft Component Object Model.

Pre-reqs:

ECA222

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV236 ENV HLTH AND SAFTY SPEC PRJECT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to allow the student to exercise the capabilities developed in other courses within the environmental areas. Special current topics important to the environmental or safety field are also incorporated into this class. Students will choose approved projects compatible with their interest and background. An environmental problem will be studied and all regulations that affect the problem are researched, and a plan of action for compliance, abatement and/or remediation will be developed.

Pre-reqs:

Or ITD122

Sciences

Biology

BIO142 GENERAL BIOLOGY II

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

The topics for this course include: origins and biodiversity of life through an evolutionary survey of viruses, bacteria, plants and animals; the principles of biological classification; the identification and dynamics of biological ecosystems; and the design and reporting of biological research. The supporting laboratory aligns with lecture and topics include: examination and dissection of representative organisms to show evolutionary progression; exploration of phylogenetic concepts and analysis; and evaluation of local ecosystems to identify population dynamics and the effects of pollution. Students will work in groups to design, conduct, and report the results of a research experiment in an acceptable scientific format. TAG approved course-OSC024, Biology sequence, effective Spring 2008. TAG approved OSC004, Biology I, effective Spring 2008.

Pre-reqs:

Information Tech

Computer Science

CPD221 ORACLE DATABASE:PL/SQL PR

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

PL/SQL programming & tuning is an intense hands-on course that is designed to give the student maximum exposure to Oracle PL/SQL tuning and optimization. The student learns by doing dozens of in-class exercises and the student will be guided from very simple PL/SQL tuning to advanced PL/SQL performance optimization. The topics start with the basics of SQL and progress into increasingly complex queries, including table joins, subqueries and creating Oracle views. The PL/SQL section begins with simple concepts and the student gradually masters PL/SQL through increasingly challenging classroom exercises.

Pre-reqs:

Or CPD122

Information Tech

Computer Science

CPD121 DATA MODELING AND DATABSE DSGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces database concepts and describes how to properly design, create and interface with a relational database. The course begins with definition of important terms. It demonstrates the specific rules that one must follow to design and create a normalized relational database. SQL is also an important topic. Students complete a collection of hands-on labs to learn how to apply the techniques presented.

Pre-reqs:

And ITD100

SGE222 3D GAME DESIGN AND DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on 3D game development. The student will learn the essentials of 3D game development, including basic algorithms, texture mapping basics, 3D math, lighting, etc.

Pre-reqs:

Or SGE223

CSE226 SFTWRE ENG FOR HAND-HELD DEVIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides an overview of application development and the lifecycle for mobile devices. In this course, students will create basic applications to run on a mobile operating system. Students will also learn how to use available emulation environments to run and test their applications.

Pre-reqs:

Or CSE231

Information Tech

Computer Science

WDD123 Internet Design Tools

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to tools that are used in the Industry to develop and code websites. Graphic development with industry standard photo editing software is also introduced. Upon completion of this course, the student will have mastered implementation of web coding software to rapidly develop web sites.

Pre-reqs:

ECA228

WDD124 FLASH ANIMATION AND DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the students to Adobe Flash. The student will learn to work with Flash effectively and master the concepts of animating with Flash. Topics include developing animations, tutorials and web objects with Flash. Programming in Flash with Actionscript is introduced. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or WDD121

WDD221 WEB DEV W JAVASCRIPT AJAX

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to Javascript and AJAX. Students will be able to develop interactive web sites using JavaScript and AJAX components. Various assignments enhance the student's ability in JavaScript, including interaction with the browser, regular expressions and form validation. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or WDD121

Mathematics

Mathematics

Mathematics

Mathematics

MTH092 Prealgebra II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline. Topics to be covered are positive and negative fractions; positive and negative decimals; ratios, rates and percent; solving equations and word problems.

Pre-reqs:

Or Test & Score: M091 Transfer Prof/Placement - 3

Business/ Entrepreneurial

Business Mgt/Entrep

CUL223 Catering & Buffet/Event Mgt

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide information for students to be able to plan, coordinate and execute catering jobs, set up and manage buffets and schedule and plan events as well as manage the events. Students will learn to coordinate the “front of the house” and “back of the house” activities to conduct a well-planned event which is catered on or off premise.

Pre-reqs:

And CUL120

Health and Human Services

Nursing

NUR122 NURSE CARE CHILDBEAR FAM

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

This course focuses on nursing care of the child-bearing family. New trends in maternity-child nursing are included. CTAG CTADNUR002 approved Spring 2012.

Pre-reqs:

And ENG124

Or NUR225

Health and Human Services

Nursing

NUR221 NUR CARE PERSON/ALT I

Credit Hours: 6 Contact Hours: 12 Lecture Hours: 3 Lab Hours: 9 Other Hours: 0

This course introduces the nursing care of persons with alterations in health, with continued emphasis on technical nursing skills. The peri-operative experience is also introduced. The health care needs of the young and middle adult are examined. CTAG CTADNUR002 approved Spring 2012.

Pre-reqs:

Or BIO123

NUR223 NUR CARE PERSON/ALT III

Credit Hours: 8 Contact Hours: 14 Lecture Hours: 3 Lab Hours: 11 Other Hours: 0

This course continues to develop the knowledge base necessary for nursing practice. Initially, the course focuses on the nursing care of clients with more complex and acute health problems. Emergency nursing principles are introduced. Management concepts, the organization as a system and the nurse as a manager of client care are subsequently addressed. Application of these concepts is facilitated through a preceptorship. This directed nursing practice will assist in role transition from student to beginning associate degree nurse.

Pre-reqs:

And SOC121

Fire and EMS

EMS222 PARAMEDIC III/SEMINAR

Credit Hours: 4 Contact Hours: 18 Lecture Hours: 6 Lab Hours: 12 Other Hours: 0

This course is third in a four-course sequence. Content in the sequence follows the objectives for paramedic education according to the Ohio Administrative Code 4765. This course places emphasis on team leadership in the clinical and infield setting. Infield internship is included. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

And EMS223

Health and Human Services

Fire and EMS

FST229 FIREFIGHTER TRANSITION

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 4 Lab Hours: 3 Other Hours: 0

This course meets the requirement in the Ohio Revised Code regarding the certification of a level 1 Firefighter. Instruction includes topic areas taken from NFPA 1001 Firefighter 1. This course can be used as the second step in a two-step process in becoming a Firefighter trained to the Firefighter level 1. Successful completion of this course is required to take the state certification test at Firefighter level 1. A student must have a volunteer level Firefighter certification to register for this course.

Pre-reqs:

FST128

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM229 PERSUASION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides a foundation in the application of theories, principles, and strategies of social influence in a variety of contexts. Empirical investigations of persuasion, social influence, and compliance-gaining will be studied, in addition to strategies and techniques of persuasion and persuasion resistance relating to a wide variety of real-life communication contexts.

Pre-reqs:

IDS102

Or Test & Score: Compass Reading - 080

Sciences

Biology

BIO101 INTRO TO ANAT AND PHYSIO

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Provides understanding of human structure and function of all body systems. Focus will be given to beginning chemistry principles, cells and tissues. This course is for the student who has little or no background in human anatomy and physiology. TMNS Approved effective Autumn 2008.

Pre-reqs:

IDS102

Sciences

Biology

BIO101A INTRO TO ANAT AND PHYSIO A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 1.5 Lab Hours: 0 Other Hours: 0

Introduction to Anatomy and Physiology provides an understanding of human structure and function of all body systems. Focus will be given to beginning chemistry principles, cells, and tissues. Module one covers chemistry and the following body systems (Integumentary, Musculoskeletal and Nervous control system). This course is for the student who has little or no background in human anatomy and physiology.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Business/ Entrepreneurial

Business Mgt/Entrep

MKT235 INTRODUCTION TO LOGISTICS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces the student to the role of logistics in national and multinational business and government activities. A variety of analytical tools and techniques useful in solving logistics will be explored. The student will understand the individual components of logistics and their interrationalships within individual companies and within the supply chain.

Pre-reqs:

And MKT226

BUS222 MACROECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An in-depth study of macro-economic concepts and principles such as market supply and demand, unemployment and inflation, monetary and fiscal policy, national income accounting and Classical and Keynesian models. Upon completion, students should be able to apply and demonstrate an understanding of the above topics relative to today's economy. TAG approved course- OSS005 effective Fall 2005. TMSBS Approved effective Autumn 2008.

Pre-reqs:

IDS102

Business/ Entrepreneurial

Business Mgt/Entrep

ENT120 ENTREPRENEURSHIP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to the entrepreneurial process from conception to birth of a new venture. Students will examine elements in the entrepreneurial process--personal, sociological, and environmental--that give birth to a new enterprise. Critical factors for starting a new enterprise such as alternative career prospects, family, friends, role models, the state of the economy and the availability of resources will be explored. Students will be introduced to practical tools they can use to further their careers in business, both in entrepreneurship and in more traditional company environments. This course simulates the experiences that entrepreneurs undergo in conceiving, launching, and operating new businesses. The courses enables students to evaluate an entrepreneurial career for themselves. In doing so, it provides want- to-be entrepreneurs with a framework for selecting, funding, and starting their own new ventures.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Educ/ Liberal Arts/ Math

Social Sciences

PSY222 Psy Aspect of Therapy

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Covers the general principles of interaction with a specific focus on those unique challenges confronting the patient and the health care provider. Attention is given to the psychosocial needs of both the patient and the health care provider. Issues of communication, patient-provider relationships, patient dependency, personal values, and relating to people from differing cultures, ages, and special needs are discussed.

Pre-reqs:

Or IDS102

SOC121 SOCIOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduces the general theories of the field, and research methods. Students will examine the impact of culture, social interaction, social structure, socialization, and social institutions on social behavior.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Or IDS102

Information Tech

Computer Security

Information Tech

Computer Security

NET244 MICROSOFT NETWORKING I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course covers installing and configuring a Microsoft server operating system. Students will demonstrate skills necessary to implement a core infrastructure into an existing enterprise environment. Topics include working with Active Directory, implementing local storage, implementing file and print services, and implementing server virtualization with Hyper-V.

Pre-reqs:

NET120

NET131 MICROSOFT CLIENT OPERATNG SYS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course includes installing and administering the Windows Operating Systems. It also covers security issues, installation troubleshooting, desktop issues, and desktop configuration.

Pre-reqs:

NET120

Health and Human Services

Health Information

HIT223 HIM SUPERVSN:CONCPTS AND PRACT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduction to the concepts and practices of management and the role of the supervisor as it relates to the Health Information Management department; strategic planning and developing goals and objectives; importance of leadership and working in teams; orientation and training; monitoring resources and budgeting; study of practical problems in supervision.

Pre-reqs:

HIT224

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS124 POLICING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the role of local, state, and federal law enforcement in American society. Topics include the structure and functions of police organizations; the historical development of policing; methodology; models of policing, including community policing; and current issues in law enforcement. TAG approved Spring 2012 OSS032.

Pre-reqs:

CJS121

PLS221 TORTS AND PERSONAL INJURY LAW

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on civil wrongs and their corresponding remedies, including the paralegal's roles and responsibilities in tort litigation. Topics include intentional torts, negligence, products liability, malpractice, strict liability, remedies and defenses to tort claims.

Pre-reqs:

PLS122

Health and Human Services

Medical Lab

MLT222 CLINICAL CHEMISTRY

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3.5 Lab Hours: 3.5 Other Hours: 0

The course is designed to introduce the student to the principles of laboratory instrumentation, clinical chemistry procedures and quality control concepts. The course covers renal and liver function; carbohydrate, lipid and protein metabolism; hormones; electrolytes and mineral balance; blood gases; and clinical enzymes and therapeutic drug monitoring. The class uses lecture, case studies and laboratory procedures.

Pre-reqs:

And CHM122

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC227 PAYROLL ACCOUNTING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is the first course in a two-course sequence in payroll accounting. This course is focused to the Fundamental Payroll Certification and upon completion of the two courses the students should be prepared to take the Fundamental Payroll Exam, administered by the American Payroll Association. Specifically, this course covers the study of payroll, records keeping regulations, tax reporting requirements, accounting procedures and journal entries, and mandatory deductions of various taxes. Also covered is the employer's related taxes and preparation of various payroll tax forms, the Fair Labor Standards Act, and other Federal and State laws that regulate payroll.

Pre-reqs:

ACC121	Can be Taken Concurrently

ACC232 GOVT AND NOT-FOR-PRFT ACCT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces students to the accounting requirements for governmental entities. As part of the course students are required to complete an extensive practical applications project on governmental accounting and financial reporting. Students should have the proficiency to prepare and interpret accounting and financial reporting information of various not-for-profit organizations as well as health care organizations and educational institutions. Upon completion, the student should have a working knowledge of the budgetary and operational accounting of governmental entities, as well as the extensive reporting required for Comprehensive Annual Financial Report (CAFR).

Pre-reqs:

ACC132

Business Mgt/Entrep

MGT121 PRINCIPLES OF MANAGEMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an in-depth, balanced overview of management through coverage of basic management functions: planning, organizing, staffing, directing and controlling. Presents the current insights of open-systems theory, contingency theory, organization theory, organizational behavior and contemporary management science. Upon completion, students should be able to demonstrate an understanding of the above topic areas.

Pre-reqs:

BUS121

Information Tech

Computer Science

Information Tech

Computer Science

CSE121 MOBILE DEVELOP ARCHITECTURE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the overall methodologies of developing applications for mobile and handheld devices. The design, architecture, and techniques of mobile and handheld devices will be analyzed. Upon completion of the course, students should have an understanding of the mobile application development process.

Pre-reqs:

Or CSE122

CSE225 CROSS-PLATFORM MOB APP DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines the various methods for developing mobile applications that are compatible with various operating systems. Coding with frameworks that allow for deployment across different systems will be conducted. Upon completion of the course, students should understand how to create mobile applications that will function on different mobile and handheld devices.

Pre-reqs:

And CSE222

Health and Human Services

Dental Hygiene

DHY133 CLINICAL DENTAL HYG I

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 0 Lab Hours: 8 Other Hours: 0

Supervised clinical patient care experiences which reinforce fundamentals, correlate with, and allow the application of, dental procedures and concepts presented in Dental Hygiene Theory I. Emphasis on application of basic skills and professionalism.

Pre-reqs:

DHY131

Health and Human Services

Dental Hygiene

DHY232 CLINICAL DENTAL HYG II

Credit Hours: 4 Contact Hours: 12 Lecture Hours: 0 Lab Hours: 12 Other Hours: 0

Supervised clinical patient care experiences which refine fundamentals, correlate with, and allow application of, dental hygiene procedures and lecture concepts presented in Dental Hygiene Theory II. Emphasis on total patient care and treatment planning, including judgment and decision-making. Off site clinical experiences required.

Pre-reqs:

DHY134

DAS228 DIRECTED CLINICAL PRACTICE

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course is a directive practice course, where under the supervision of a faculty dentist, expanded functions auxiliary students will provide restorative patient care as allowed by the EFDA certification. Students will be required to participate in onsite and offsite clinical rotations.

Pre-reqs:

DAS226

Sciences

Biology

CST121 MODELING AND SIMULATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 1 Other Hours: 0

Analyze a variety of scientific problems by designing a representative model, implement the model, complete a verification and validation process of the model, report on the model in oral and written form, and changing the model to reflect corrections, improvements and enhancements.

Pre-reqs:

Or MTH223

Information Tech

Computer Science

Information Tech

Computer Science

CSE221 ANDROID DEVELOPMENT 1

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers how to build mobile applications for the Google Android platform. The history and architecture of the Android operating system will be analyzed. Upon completion of the course, students will be able to create simple Android applications and also have an understanding of Android SDK Tools.

Pre-reqs:

And CSE231

Sciences

Chemistry

CHM101 INTRO TO CHEMISTRY

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

A problem-solving course to familiarize the student who has limited previous chemistry background with basic chemistry and mathematical skills. Course covers basic algebra skills, powers of ten (exponents), dimensional analysis, metric measurements and conversions, atomic theory, molecular structure, the periodic table and its uses, inorganic nomenclature, the mole concept, the gas laws and different types of solutions. The recitation portion of this class will involve pertinent problem-solving. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: ACT Math - 22

Educ/ Liberal Arts/ Math

Mathematics

MTH135 PRECALCULUS

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

Study of linear and quadratic equations, their applications; solving rational and radical equations; complex numbers; linear, polynomial and rational inequalities; equations and inequalities involving absolute value; graphs of equations; relations and functions; transformation of functions; combining functions and composite functions; inverse functions; exponential and logarithmic functions and equations; angles and their measure; right angle trigonometry, trigonometric functions of any angle, graphs of trigonometric ratios; inverse trigonometric functions; trigonometric identities and equations, sum, difference, double angle, half angle; applications of trigonometric functions; systems of equations; matrices and determinants; the conic sections; sequences and series.

Pre-reqs:

Or Test & Score: Compass Algebra - 054

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

CUL124 Meat & Fish-Prep II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide training and skill development in preparing meat and fish dishes used in a culinary arts environment. Students will use a variety of preparation and cooking methods to demonstrate ability to work with meat and fish products.

Pre-reqs:

CUL123

MGT235 Facility & Event Mgt for Sport

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides students with an understanding of sports facility and event management. Sports facility management consists of identifying goals of the event and coordinating people in the organizations involved to achieve those goals. Sports facility management consists of planning and designing a sports facility, staffing of management, facility marketing, developing revenue streams, facility scheduling, and general facility maintenance in order to host the sporting events.

Pre-reqs:

And MKT121

Educ/ Liberal Arts/ Math

Education

EDU124 INFANT TODDLER CURRICULUM

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Studies theory and practice of infant toddler curriculum, including current research. Goal setting, curriculum design, lesson planning and instructional methods based on NAEYC guidelines. Five observation hours required.

Pre-reqs:

EDU131

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT237 LEGAL OFFICE APPLICATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed for students to gain practical experience in preparing legal documents selected from actual cases, review general information about the tasks assigned, follow established procedures and learn the job responsibilities of a legal assistant through simulated activities. Fundamentals of grammar and punctuation skills, as well as the formatting of legal documents, are emphasized. Upon completion, students should be able to perform legal office responsibilities and produce a variety of legal documents using word processing, spreadsheet, database, and presentation software packages.

Pre-reqs:

And AOT224

Business/ Entrepreneurial

Business Mgt/Entrep

CUL123 FUNDAMENTAL COOKING-PREP I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses the development and application of cooking practices, procedures and techniques. The students will understand the techniques of preparation and prepare soups, stocks, sauces, and dairy items. They will use dry heat methods of cooking, moist heat cooking methods, prepare pantry items and perform garde manger (cold food preparation) duties.

Pre-reqs:

CUL122

Educ/ Liberal Arts/ Math

Mathematics

MTH106 Math for Technology

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed for students in computer science and information technology. Areas of focus will include: sets and Venn diagrams, numbering systems, logic, graphs, greedy algorithms, counting principles, combinatorics, discrete probability, sequences, and series.

Pre-reqs:

Or Test & Score: ACT Math - 19

English

Educ/ Liberal Arts/ Math

English

ENG126 TECHNICAL GRAMMAR AND STYLE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an intense review of modern English grammar, style, and punctuation, and examines how these subjects pertain to current technical writing.

Pre-reqs:

ENG124

ENG228 WRITING FOR THE WEB

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Writing for the Web is designed to introduce students to the unique writing style, issues, and audience associated with writing for the web and digital media. Students will come to understand how users read on the web, the dual nature of language and aesthetics in web writing, flow and construction of information on the web, language appropriateness and usage, and the relationship between audience, message, and language.

Pre-reqs:

ENG124

Mathematics

MTH108 Explorations in Modern Mathema

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce the student to the beauty and utility of mathematics in everyday life. The student will be able to reason critically, think creatively, assess evidence from conclusions, and use skills in abstract and quantitative thinking. Topics covered in this course will be: Thinking critically, numbers in the real world (percentages and index numbers), managing your money, statistical reasoning, describe statistical data using measures of center and spread, statistical inference, the normal distribution, solve basic probability applications, mathematics and business.

Pre-reqs:

Or Test & Score: ACT Math - 19

Educ/ Liberal Arts/ Math

Mathematics

MTH105 Math for Allied Health

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to provide health science students with the mathematical skills and concepts required to be successful in allied health fields. Topics covered in this course will be: allied health applications, metric conversions, apothecary and household systems, systems of measurements, use of formulas, dimensional analysis, percent, decimals, fractions, ratios and proportions, direct and inverse variation, solutions, dosage calculations, allied health graphs, scientific notation, and statistical concepts.

Pre-reqs:

MTH091

And MTH092

Information Tech

Administrative Srv Off Applion

ITD108 Microsoft Outlook

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the use, style, and features of the Microsoft Outlook program. Upon completion, students should be able to utilize Microsoft Outlook as a communication and business tool.

Pre-reqs:

IDS102

Or Test & Score: Compass Reading - 066

Education and Human Serv

Education

EDU132 Observ, Assess, Group Mgt

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to authentic and formal tools and strategies used in early childhood settings to appropriately assess, plan, and guide young children. Topics include methods of observation, recording growth, development and behavior, interpreting assessment data, influence of culture, and child guidance and group management with an emphasis on fostering self-discipline and pro-social skills. Ten observation hours are required.

Pre-reqs:

ENG011

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

TOY102 Toyota Electrical Systems I

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This course is designed to give the student an understanding of DC electrical principles including Ohm's Law, basic circuits, semiconductors, automotive wiring and common electrical components. Emphasis will be placed on the maintenance, diagnosis and repair of basic automotive electrical systems including battery, starting, and charging systems, electrical motors, switches and relays. Students will also be introduced to computerized vehicle control systems. Laboratory periods will allow the student to develop proficiency in the use of wiring diagrams, diagnostic flow charts and hands-on techniques utilizing DVOM's and other electrical test instruments. The students will learn the Toyota six step diagnostic procedure and utilize it during laboratory activities to determine various faults on vehicles.

Pre-reqs:

TOY101	Can be Taken Concurrently

TOY106 Toyota ManTrans & Drivetrains

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This class will teach students the skills necessary to service and repair Toyota manual transmission and four wheel drive systems. Students will perform inspections, service, and repairs on clutch systems. They will also overhaul a manual transmission, manual transaxle, front differential, rear differential, and a transfer case. Students will also learn to diagnose and repair Toyota electronic four wheel drive control systems. Students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Upon completion of the course students will be prepared to take the ASE test A-3 (Manual Drivetrain and Axle).

Pre-reqs:

TOY102

TOY201 Toyota Electrical Systems II

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

In this course, students will learn to diagnose and repair advanced electrical faults including shorts, opens, and high resistance faults in Toyota multiplex computer networks. In order to diagnose these concerns students will learn how to utilize the advanced features of the Toyota scan tool. Students will also learn to use advanced diagnostic equipment and procedures. Upon completion of this course students will be able to diagnose and repair the most advanced electrical problems. Students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Students completing this course are prepared to take ASE test A-6 (Electrical and Electronic Systems).

Pre-reqs:

TOY102

Business/ Entrepreneurial

Automotive

TOY203 Toyota HVAC Systems

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This course will cover diagnosis, service and repair of the Toyota heating, ventilation, and air conditioning (HVAC) systems. They will understand how to connect and interpret air conditioning gauge set readings. HVAC system performance tests will be performed to determine if systems are functioning as designed. All major components of the HVAC system will be located, identified, defined, removed and reinstalled. Advanced climate control systems will also be covered in this class. Students will learn to diagnose climate control faults using schematics, specifications, and procedures retrieved from the Toyota Information System. Students will also use the Toyota scan tools, digital volt ohm meters, and other required diagnostic equipment during this class. Students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Upon successful completion of this course students will be prepared to take ASE test A-7 (Heating, Ventilation, and Air Conditioning).

Pre-reqs:

TOY201

Information Tech

Computer Science

CIS126 FUNDAMENTALS OF INFO SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to familiarize students with core information systems principles and practices. Topics include, but are not limited to, types of information systems, hardware and software, data modeling, database systems, internet technologies, systems development, careers, global and social impacts, and industry trends.

Pre-reqs:

And ITD106

Health and Human Services

Massage Therapy

MAS225 MASSAGE THERAPY IV

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

In this course students continue to study the practice of Massage Therapy in both a general and clinical setting.

Pre-reqs:

MAS224

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT255 AUTO AFTERMKT VEH EXTERIOR MOD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course provides students with the preparatory experience required to perform vehicle exterior modifications. Students will be exposed to current automotive aftermarket industry standards. Attention to detail is reinforced throughout student projects. This course concentrates on the modification of vehicle body aerodynamics, exterior lighting, and visual appeal through the application of automotive aftermarket accessories and practices.

Pre-reqs:

AUT125

AUT136 PRACTICAL AUTO DETAIL APPLIC

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Students will incorporate detailing techniques and critical thinking to real world scenarios while working together in teams on multiple group projects. The groups will access real-life vehicle detailing problems and discuss the proper corrective actions. Students will then execute their plans and evaluate the results. This class requires the students to apply knowledge and skills acquired in previous vehicle detailing classes to complete basic to advanced-level tasks in the detailing industry.

Pre-reqs:

AUT132 Can be Taken Concurrently

AUT134 AUTO UNDER-HOOD/UNDER-CAR DET

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This class provides students with the knowledge and introductory experience required to detail the under-hood and under-car areas of vehicles in the automotive industry. At the completion of this class, students should be able to choose and identify proper tools, cleansers, and other chemicals associated with vehicle under-hood and under-car detailing. Students will learn the appropriate techniques of washing components, cleaning, and applying the proper chemical conditioners on all major under-hood and under-car areas of a vehicle. Students will be expected to follow all current safety standards including the application of all Material Safety Data Sheets (MSDS) chemical recommendations.

Pre-reqs:

AUT132 Can be Taken Concurrently

Information Tech

Computer Science

Information Tech

Computer Science

CSE233B C++ Programming B

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course focuses on software engineering concepts, arrays, pointers, and strings found in C++. In addition, the course also examines data abstraction, classes, and operator overloading in C++. Principles of good software engineering are emphasized. Hands-on labs prepare students to solve real-world problems.

Pre-reqs:

CSE233A

Computer Security

IMT251 AUTHORING AND VIDEO COMPRESSON

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers advanced topics in video compression for both DVD and the web. Streaming video, video integration with other web media and flash video will be covered through a series of production/ compression challenges. DVD authoring standards, compression rates and DVD preparation will also be covered.

Pre-reqs:

IMT242

Educ/ Liberal Arts/ Math

Education

EDU224 EARLY CHILDHOOD PROG ADM

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Examines key aspects of starting and operating various types of early childhood programs. Policies/procedures, legalities, supervision, finances, planning and organizing, and personnel management are emphasized.

Pre-reqs:

Or ECE121

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC229 COMPUTERIZED ACCTG APPLICATONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course involves the application of the student's accounting knowledge in a computerized setting. The student will record and report accounting information using various commercial accounting packages, including but not limited to QuickBooks Pro and Excel, and practice in problem solving and meeting project deadlines throughout the course. Upon completion, the student should have a functional knowledge of computerized accounting applications and procedures.

Pre-reqs:

Or ENT123

Educ/ Liberal Arts/ Math

Mathematics

MTH124 Statistics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

And Test & Score: M094 Transfer Prof/Placement - 2

Engineering Tech

Engineering/Applied

ARL238 ADV COMPRESSOR ION NITRIDING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course instructs students in the material hardening process and explores the equipment used to harden materials pertaining to the ion nitriding process. Students will understand the metallurgical changes occurring in the materials that result in hardening the outer case. Components of the nitrider will be defined and basic troubleshooting and maintenance tasks will be addressed.

Pre-reqs:

ARL145

Health and Human Services

Dietary Management

Health and Human Services

Dietary Management

DTR221 MEDICAL NUTRITION THERAPY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides advanced nutritional principles, including the mechanisms through which nutrients meet the human biological needs. The applications of the principles of nutrition as they relate to diet in disease with an emphasis on the effects of pathological conditions on nutritional needs are presented. The process of medical nutrition therapy is approached through the use of the 'Nutrition Care Process', as required by the Academy of Nutrition and Dietetics.

Pre-reqs:

NTR121

And DTR223 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

MTH221 CONCEPTS OF CALCULUS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A study of the theory and techniques of analytic geometry, differential and integral calculus, including variables, functions, limits, differentiation, integration and applications of the derivative and integral.

Pre-reqs:

Or Test & Score: Compass Algebra - 084

MTH223A ANALYTIC GEOMETRY-CAL I A

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of analytic geometry, limits, continuity, derivatives, tangent and normal lines, derivatives of trigonometric functions and related rates. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the value of a derivative at a given point. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

Or Test & Score: ACT Math - 27

Health and Human Services

Massage Therapy

Health and Human Services

Massage Therapy

MAS223 MASSAGE THERAPY REVIEW

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course contains a review of human anatomy and physiology in preparation for the licensing exam for Massage Therapy as a Limited Medical Practice in the State of Ohio.

Pre-reqs:

Or BIO123

Sciences

Biology

BIO121 ANATOMY AND PHYSIOLOGY I

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The human body is presented as an integrative, homeostatic organism with emphasis on the underlying chemical and cellular processes necessary for proper functioning. The course covers basic histology and examines the following body systems: integumentary, muscular, skeletal, central nervous, and somatic nervous. The laboratory portion of the course includes microscopic study of tissues, detailed study of bone models and human cadaver muscles, and examination of preserved mammalian specimens. Interactive computer simulations of physiological processes are introduced. This is the first course in a two-semester sequence.

Pre-reqs:

Or Test & Score: HS Biology - 2

Educ/ Liberal Arts/ Math

Social Sciences

SOC229 The African American Experienc

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the unique cultural experiences of African Americans in the United States. This course will primarily explore sociological issues and concepts and their relationship to the African American experience. A broad historical overview will be presented that will focus on African arrival in the Americas, slavery, reconstruction and the Civil Rights movement. Special emphasis will be placed on the social construction of race, discrimination and inequality in the United States and strategies to ameliorate discrimination and achieve equal opportunity.

Pre-reqs:

SOC121

Health and Human Services

Physical Therapy

Health and Human Services

Physical Therapy

PTA122 MUSCULOSKELTAL ANATOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

An in-depth study of the musculoskeletal system including: anatomical terms, bone and bony landmark locations; articulations: skeletal muscle locations and actions; the actions and planes of movement available at the joints; and the types of muscle contractions which can occur at the synovial joints. A basic study of skin is presented. Laboratory activities, cadaver studies and practicals are a required component of this course.

Pre-reqs:

Or BIO122 Can be Taken Concurrently

PTA123 KINESIOLOGY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The study of human anatomy emphasizing the biomechanics, motion and peripheral innervations of the musculoskeletal system as a basis for understanding normal and abnormal function and the development of exercise and gait programs. The fundamentals of posture, muscle physiology, muscle function, gait analysis and strength will be covered. Students will review muscle locations and actions, as well as locations and functions of selected ligaments, the intrinsic muscles of the hands and feet, and the innervations of the muscles of the extremities. Laboratory activities, cadaver studies and practicals are a required component of this course.

Pre-reqs:

PHY101

PTA222 PTA PROCEDURES II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

This course will present to the students the impairments, disabilities, functional limitations, and interventions of selected musculoskeletal, rhematological and cardiovascular conditions including spinal disorders and amputation. Also included, will be an overview of CNS anatomy, physiology, and pathology, sensory integration, motor development and motor control. Laboratory activities, written assignments and competencies, are required components of this course. Students will perform selected therapeutic interventions with patients under direct PT/PTA supervision as part of laboratory component of this course.

Pre-reqs:

And PTA125

Health and Human Services

Physical Therapy

PTA226 FUNCTIONAL ANATOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

An in-depth study of the musculoskeletal system with particular attention paid to the movement of joints, motions of the spine and extremities, as well as prime movers involved in these motions. Application of the knowledge of human anatomy with emphasis on biomechanics and functions relative to the neuromusculo-skeletal system. Motion of the human body is studied as a basis for therapeutic exercise and function.

Pre-reqs:

BIO123

Occupational Therapy

OTA222 DEV CLINICAL EXPERIENCE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 2 Other Hours: 1

Training of transfer techniques, range of motion, inhibition and facilitating techniques. Training in the use of self-maintenance skills and assistive devices. Supervised work experience in a school, hospital or workshop servicing clients with developmental disabilities.

Pre-reqs:

BIO123

OTA223 LIFE SPAN DEVELOPMENT

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

The study of human growth and development from birth through old age. Focus is on a multi-theoretical approach defining organic and environmental determinants of illness vs. wellness. Students explore therapeutic treatment implications related to application of developmental principles in working with various patient populations.

Pre-reqs:

ENG124

Medical Assisting

Health and Human Services

Medical Assisting

MAT223 MEDICAL OFFICE PROCEDURES

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is designed to prepare students for advanced medical office administrative procedures. Hands-on projects will allow students to experience appointment scheduling, telephone screening, written communication, billing and collection techniques, general banking, and accounts payable. Students will demonstrate the ability to organize their work, set priorities, and make decisions. Electronic health records and accounts receivable software are used in this course.

Pre-reqs:

MAT122

Engineering Tech

Engineering/Applied

EST222 Industrial Networks

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide a basic understanding of different types of networks that are used in an industrial facility. Course will cover network terminology, hardware, software, and basic troubleshooting.

Pre-reqs:

EET120

Information Tech

Administrative Srv Off Applion

AOT238 WEB DESIGN FOR OFFICE PROF

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, design, and application for web-page publishing. Students will produce web pages by combining text, graphics, and scanned images. Upon completion, students will be able to design and produce professional web pages using advanced publishing features.

Pre-reqs:

Or ECA122

Sciences

Physics

Sciences

Physics

PHY101 PRINCIPLES OF PHYSICS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Survey course that assumes no familiarity with physics. Space, time, matter, motion, force, momentum, mechanical energy, heat, electricity, magnetism, light, units of measure and other concepts are studied descriptively. Basic calculation and problem-solving techniques are introduced, including a brief review of elementary algebra. Laboratory work emphasizes how to read measuring instruments, proper use of measured data in calculations, and how measured data can be used to test theories of physics. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Health and Human Services

Dietary Management

DMA126 MFS FOR DIETARY MGRS EXP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 2 Lab Hours: 0 Other Hours: 1

This course provides Foodservice Operations Management experience in an off-campus facility. This experience is intergrated with the academic instruction of DMA 125, directly supervised by a Registered Dietitian, a Registered Dietetic Technician or a Certified Dietary Manager

Pre-reqs:

Business/ Entrepreneurial

Business Mgt/Entrep

MGT241 CASINO SECURITY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce students to various forms of cheating, theft, fraud, or loss in the gaming industry. Students will examine proven techniques for detecting threats to casino security and ways to protect the casino, assets, guests, and employees. Students will investigate best practice techniques, strategies, tactics, and metrics, required to effectively monitor the gaming operations; for example, suveillance audits, threat analysis, card counting, game protection techniques, players' club theft and fraud, surveillance standard operating procedures, and nightclub security.

Pre-reqs:

MGT141

Health and Human Services

Medical Assisting

Health and Human Services

Medical Assisting

MAT234 INTRODUCTION TO PHLEBOTOMY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on phlebotomy and microcapillary puncture skills, collection/handling of specimens, quality assurance, infection control, safety and law and ethics.

Pre-reqs:

IDS102

Educ/ Liberal Arts/ Math

English

ENG124 COLLEGE COMPOSITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course emphasizes writing based on reading response with review of essay development, grammar, and punctuation. Emphasis is on the process of drafting, revising, and editing to achieve clarity. A research project requires APA or MLA documentation. TMEC Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: HS English - 3

Mathematics

MTH135 PRECALCULUS

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

Study of linear and quadratic equations, their applications; solving rational and radical equations; complex numbers; linear, polynomial and rational inequalities; equations and inequalities involving absolute value; graphs of equations; relations and functions; transformation of functions; combining functions and composite functions; inverse functions; exponential and logarithmic functions and equations; angles and their measure; right angle trigonometry, trigonometric functions of any angle, graphs of trigonometric ratios; inverse trigonometric functions; trigonometric identities and equations, sum, difference, double angle, half angle; applications of trigonometric functions; systems of equations; matrices and determinants; the conic sections; sequences and series.

Pre-reqs:

Or MTH123

Sciences

Physics

Sciences

Physics

PHY125 ASTRONOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This class is a study of fundamentals of astronomy. Topics include: the solar system, planets, stars, galaxies, and the universe. This course is a comprehensive survey of astronomy designed primarily for the non-science major. Pivotal discoveries discussed in class are reinforced through lab activities that replicate topic-related studies. This course should provide the student with an understanding of the nature of the universe and insight into the scientific fields that provide the evidentiary basis for modern cosmological theories.

Pre-reqs:

Or MTH094

Business/ Entrepreneurial

Automotive

AUT284 GM WATERLEAK AND WINDNOISE MGT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course consists of a WBT and a hands-on component and is intended for body/trim service technicians. Topics include proven diagnostic procedures, test equipment and methods, and tools for adjustment and sealing operations. Upon completion of this course, technicians will be able to: identify the components used for waterleak and airflow control management, identify the steps used to diagnose customer concerns pertaining to waterleaks and wind noise, identify the appropriate repair procedures to correct waterleak and windnoise concerns, and accurately and efficiently perform diagnostic and repair procedures for waterleak and windnoise conditions.

Pre-reqs:

Engineering Tech

Engineering/Applied

AIT122 MACHINE TOOLS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

With assigned lab projects, the student will cover basic machine operations used in area industries. Topics include safety, basic machines, precision tools, layout procedures, cutting tools and various machine setups to accomplish laboratory projects. Inspection and quality control will be stressed.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KARF140 Painting 1

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

KARC100 Understanding Architecture

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Business Studies

BTD203 BUS INDEPENDENT STUDY

Credit Hours: 3 Contact Hours: 30 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Business Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisory and dean for Business Technologies will determine course content, meeting schedules and credit hours.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS121 INTRO TO CRIMINAL JUSTICE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This introductory course provides an overview of the American criminal justice system, covering its three main components: policing, the courts, and corrections. Topics include historical development of the criminal justice system, theoretical explanations of criminal behavior; measuring crime statistics, strategies and models of law enforcement, criminal law and procedure, sentencing and punishment, and the juvenile justice system. TAG approved Spring 2012 OSS031.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV146 BASIC WATER TRTMNT-SEDIMTATION

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of water treatment. The topics of this course include general issues operators face when dealing with sedimentation basins. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

EUT225 SUBSTATION TECHNOLOGY IV

Credit Hours: 7 Contact Hours: 12 Lecture Hours: 2 Lab Hours: 10 Other Hours: 0

This course provides advanced knowledge and skills to safely perform high level-maintenance in electrical substation and switchyards; understand and apply the proper cable pulling/bus work techniques; installation of substation conductors/wire, switches and grounding techniques. Included are advanced electrical skills training, as applicable to the use and installation of batteries, fuses, transformers, regulators/reclosers, circuit breakers, and capacitors within-depth study of Fault/Load Interrupting equipment is accomplished. Complete inspection of Oil Circuit Breakers; which includes, Circuit Profilers training, Circuit Breaker control schemes, Circuit Breaker Time Travel Characteristics and Analysis. All above mentioned functions are performed according to the Substation Preferred.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

SOC123 DYNAMICS OF THE FAMILY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Explores various social and psychological approaches to family analysis, with emphasis on the family as a system. The transformation of the structure and function of the family from the traditional family to a more diverse definition of family is examined in relationship to changing roles and life issues. TAG approved Course-OSS023 effective Spring 2007. TMSBS Approved effective Summer 2008.

Pre-reqs:

Engineering Tech

Engineering

MET123 MATERIAL SCIENCE

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The study of the science of materials used in the fields of engineering and manufacturing. Emphasis is placed on the physical properties of materials. Areas covered include: stress and strain, hardness, creep, fatigue, metallurgy, equilibrium diagrams, and heat treatments. Advantages, disadvantages and applications of ferrous metals, non-ferrous metals, plastics, elastomers, composites and ceramics are discussed.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT230 TECHNICAL PROJECT

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This is an independent study course in which the student will create an automotive-oriented project that utilizes skills learned in previous Automotive Technology courses. The student will select an approved subject which may include functions such as research, construction and testing. Progress and performance will be evaluated throughout the semester.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

GER121 INTRO TO GERONTOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Presents a basic understanding of the historical, cultural, biological, physiological, psychological, and social contexts of aging. Addresses the changes that occur within the aging individual, how these changes influence interactions with social and physical environments, and how the older person, in turn, is affected by these interactions. Includes a discussion of age-related changes in anatomy and physiology, socialization, personality, intelligence, sensation, social support, economics and retirement, death and dying, and crime and fraud.

Pre-reqs:

Health and Human Services

Fire and EMS

FST228 FIREFIGHTER 1 & 2

Credit Hours: 11 Contact Hours: 17 Lecture Hours: 8 Lab Hours: 9 Other Hours: 0

This course meets the requirement in the Ohio Revised Code regarding the certification of a full-time paid Firefighter. Instruction includes topic areas taken from NFPA 1001 Firefighter 1 and 2. This is the highest level of Firefighter certification offered in the State of Ohio. Successful completion of this course is required to take the state certification test at Firefighter level 2. CTAG approved CTFFII003, effective Summer 2013.

Pre-reqs:

Medical Lab

MLT126 IMMUNOLOGY/SEROLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course introduces the immune system and the concepts of the immunologic response in health and in disease, as well as how serologic techniques are used in the clinical laboratory testing. Topics include the cells and components involved in the immune response, which will include the immunoglobulins and complement system. Abnormal immune responses such hypersensitivity and autoimmunity and their clinical significance will be discussed. Common serologic techniques which utilize antigen-antibody reactions for diagnostic testing are presented. The laboratory activities will include dilutions, agglutination, and other antigen-antibody serologic techniques.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

EUT123 SUBSTATION TECHNOLOGY I

Credit Hours: 6 Contact Hours: 10 Lecture Hours: 2 Lab Hours: 8 Other Hours: 0

Provides the knowledge and skills to perform maintenance in electrical substation and switchyards; understand and apply the proper techniques to operate power, power and hydraulic actuated tools, as applied to conduit forming and cable tray layouts. Included is advanced training in the operation of substation ground maintenance vehicles; rigging and construction of substation and switchyard facilities. Occupational Safety and Health Administration (OSHA) and rigging safety awareness requirements will be included in this course.

Pre-reqs:

ARL222 ADVANCED CNC OPERATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the more advanced features of CNC machine tools, including more difficult blueprints to work from, to include more complex operations such as thread cutting on the CNC lathe as well as helical circle milling on the CNC vertical machining center. The more complex programs will be handwritten and will include trigonometry calculations for the correct cutting paths. The students will also learn the use of sub programs and when to use more complex canned cycles.

Pre-reqs:

Health and Human Services

Dental Hygiene

DAS124 DENTAL ASSISTING MATERIALS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course focuses on the physical and chemical properties of various materials used in the dental office. Emphasis is placed on manipulation and practical application of dental materials chair side and in the laboratory.

Pre-reqs:

Educ/ Liberal Arts/ Math

Education

Educ/ Liberal Arts/ Math

Education

ASL121 INTR TO DEAF CULTURE COMMUNTY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to provide students with an overview of the Deaf Culture and Community; history of American Sign Language; deafness and its causes, community services available to the deaf community, American with Disabilties Act laws. Five observation hours are required.

Pre-reqs:

Health and Human Services

Nursing

HTD203 HLTH INDEP STUDY

Credit Hours: 3 Contact Hours: 30 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Health Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Health Technology will determine course content, meeting schedules and credit hours.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

AOT130 Editing, Proofreading & Lang

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course emphasizes the elements of written communication and implements advanced review in grammar, punctuation, editing, proofreading, and critical thinking skills to prepare for work in administrative, legal, and judicial reporting environments. Upon completion, students should be able to use accurate grammar, punctuation, editing, and proofreading skills in written communications.

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

HIS121 US HISTORY I -TO 1877

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the major trends and ideas in American history from the first settlements in North America to the end of the Civil War and Reconstruction. The economic, social, political and religous beliefs and issues affecting the growth and development of the American nation will be examined, along with the issues that produced conflict in the formative years of our history. Topics include: early settlements and immigration, the growth of the colonies, the American Revolution, westward expansion, sectional conflict and the Civil War. TAG approved OHS010 effective Spring 2012. TMAH approved Spring 2012.

Pre-reqs:

Social Sciences

KMUS253 Chamber Music

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Health and Human Services

Massage Therapy

MAS123 MASSAGE THERAPY A & P I

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Guided study of Anatomy and Physiology with an emphasis on massage therapy specific information. Origin, insertion, innervation and actions of up to two hundred muscles.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV128 WASTEWATER CERTIFICTN EXAM PRE

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course students will review materials that may appear on the Operator Certification Examination administered by the Ohio EPA for Class I, II and III Wastewater Operators. Students will meet with an instructor twice a week for 2 hours each meeting over an eight week period to review material that might appear on the certification examination prior to administration of the certification examinations.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS221 Music as a World Phenomenon

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL125 METALLURGICAL INSPECTION

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course has been designed to give the student a working knowledge of the processes in the manufacturing of the various types of steel and iron and the advantages and disadvantages of each. The student will be able to identify various metals from a typical color code chart as well as identify the visual characteristics of each material. The various tests used for problems from stress, work hardening, welding, as well as other evidence will be covered.

Pre-reqs:

Engineering Tech

Engineering/Applied

AIT127 LOW PRESSURE STEAMPLANT OPERTS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the principles and applications of low pressure (15psi or less) boiler operation and construction. Principles and applications of maintenance and safety are also covered in detail. This course also counts toward the overall hours toward taking your low psi boiler operator's license and helps to prepare you to take the test. This course counts for 1,400 hours of the state-required experience hours needed to apply to take the low pressure boiler operator's licensure test.

Pre-reqs:

HVC229 AIR CONDITNING REFRIG CYCLE

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The refrigeration cycle is presented together with the operation of compressors and metering devices. Equipment studied includes residential air conditioning and heat pumps, their principles of operation, their components and auxiliary devices, and performance ratings.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT247 VEH EMISSION/ ENHANC TEST DI

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to prepare the student for the enhanced inspection/maintenance (I/M) Programs. The course includes information about the enhanced I/M Programs, government regulations and emissions, emission control systems, and exhaust gas analysis. Hands- on exercises include interpreting I/M test reports, using a 5 gas engine analyzer, use of new and existing tools needed for testing oxygen sensors, catalytic converters, fuel and evaporation systems, and other emissions control components.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS234 CRIMINAL INVESTIGATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on criminal investigation. Specific topics include crime scene investigation, evidence collection, tracing stolen property, controlled substance awareness, confidential informants, line-ups, the elements of public order crimes, and officer safety and awareness.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV127 WATER CERTIFICATION EXAM PREP2

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course students will review materials that may appear on the Operator Certification Examination administered by the Ohio EPA for Class I, II and III Water Operators. Students will meet with an instructor twice a week for two hours each meeting over an eight week period to review material that might appear on the certification examination prior to administration of the certification examinations.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

ITD100 COMPUTER APP-WIND & CONCPTS

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course introduces students to basic computer concepts and the Windows operating system. Upon completion, students should be able to demonstrate an understanding of how the computer functions, applications for which it is used and graphical user interfaces.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT292 GM STEERNG AND SUSP CERT ASSMT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the students the skills necessary to work with steering and suspension systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing steering and suspension systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in the course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV230 OSHA 8-HR HAZWOPER REFRESHER

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is required by OSHA regulation as an annual refresher for the materials covered in the OSHA 40-hour HAZWOPER class. Material to be reviewed include: hazardous material chemistry, toxicology, respiratory protection, protective clothing, site decontamination and response to incidents. A certificate is awarded upon completion of this course.

Pre-reqs:

Sciences

Biology

BIO128 CLIMATE STUDIES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An introductory science course designed to familiarize students with the basics of climatology. The course focuses on the principles of the natural world and the dynamics of climate change. The impact of human activities on climate and the global system will also be explored. Real-world environmental data from the National Weather Service and historical climate records will be used to investigate, analyze, and interpret the effects of climate on our natural and human ecosystems.

Pre-reqs:

Engineering Tech

Engineering Independent Study

Engineering Tech

Engineering Independent Study

ETD201 ENG INDEPENDENT STUDY

Credit Hours: 1 Contact Hours: 10 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Engineering Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Engineering Technology will determine course content, meeting schedules and credit hours.

Pre-reqs:

Sciences

Biology

BIO130 OCEAN STUDIES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An introductory science course designed to examine the world's oceans from an earth science perspective. Students will use real-world ocean information to explore the physical, chemical, biological, and geographical properties of oceans and investigate the interactions between the oceans and the hydrosphere, atmosphere, lithosphere, and biosphere.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KARF999 Fine Arts Core Course

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS128 HUMAN RELATIONS I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on human relations. Specific topics include domestic violence, crisis intervention, missing persons, and victims' rights.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV130 WATER/WASTEWATER-PUMPS, MAINT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Using the internet, students will cover a very broad range of topics including centrifugal pumps, selection and replacement of packing, seals, hydraulics, operating conditions, preventive maintenance, motors, plans and specifications, hazard types, plant equipment and procedures, lab safety and fire prevention and hazard communications. This is a 100% web-based course.

Pre-reqs:

AIT129 STATIONARY STEAMPLANT ENGINERG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the principles and applications of Ohio code law for boiler operation, abatement equipment, boiler design and application mathematics, duplex pump and steam engine. This course also applies towards the hours necessary towards the 3rd class stationary engineer's license exam. This course counts for 1,000 hours of the state-required experience hours needed to apply to take the third-class stationary engineer's state license exam.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT146 ELECC SUSPENSION SYSTEMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers operation and diagnosis of various chassis systems, such as electronic steering systems, tire pressure monitoring systems, ride height control systems, suspension control systems, and vehicle handling control systems. Class II communications as they relate to the above systems are also covered.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS470 Folk Guitar Class 1

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT215 ACDELCO EMISSION SYS DIAG

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web course (WBT) related to vehicle emission and OBD systems. This course is intended for experienced ACDelco TSS technicians and concentrates on vehicle driveability-related emission systems diagnostics. The instructor will demonstrate emission-related diagnosis, servicing, and repair techniques. An in-depth overview of OBD-2, PCV, EGR, AIR, CAT, and EVAP operating parameters, emission systems monitors, and self-diagnostics will accompany hands-on practice. On-vehicle testing will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KMUS473 Voice Class

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT210 ACDELCO BATTERY,STRTNG&CHRG SY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (CBT) that relates to batteries starting and charging systems. Intended for experienced ACDelco TSS technicians, the course focuses on electrical system diagnostics. The course will concentrate on automotive and light truck starting and charging system design, purpose, and operation. The instructor will demonstrate electrical system diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM225 SEX, GENDER, AND CULTURE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the study of communication and its relation to sex, gender, and culture. Students will explore the complexities of gender communication in interpersonal relationships, the educational environment, the media, and the workplace. Theoretical approaches to gender development, cultural construction and reconstruction of gender, and gender communication in practice will be examined.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV147 BASC WATR TREATMNT-WATER SOURC

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of water treatment. The topics of this course include an overview of water treatment and reservoirs management. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

AIT124 PRINCIPLES OF RIGGING

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Provides a study of safe rigging principles, practices, and equipment. Topics of study include fiber and wire rope, block and tackle, lift and rigging chain, proof test, safe working load, design factor, sling geometry, fittings, and lifting and moving equipment.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS236 HUMAN RELATIONS II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on human relations. Specific topics include interacting with special needs populations, crime prevention, and community diversity.

Pre-reqs:

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KSCI9990 Basic Sciences

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Information Tech

Computer Security

IMT134 TECHNICAL MUSICIANSHIP

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The technology of MIDI controllers, sight singing and ear training are the focus of this course. Compositions will be explored using MIDI and music notation software.

Pre-reqs:

IMT135 Can be Taken Concurrently

Engineering Tech

Engineering

EET248 WORKSTATION INTERFACING

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

A study of digital circuitry and current operating systems for port input and output management to microcontroller and personal computer bus architecture. The course includes digital and analog interfacing using serial, parallel ports, and various current interface ports. TAG approved course- OET004 effective Spring 2008.

Pre-reqs:

And EET262 Can be Taken Concurrently

Sciences

Physics

Sciences

Physics

PHY121B COL PHYSIC I B W ALG

Credit Hours: 2 Contact Hours: 2.5 Lecture Hours: 1.5 Lab Hours: 1 Other Hours: 0

Study of motion, force, momentum, energy, mechanical advantage, structure and properties of matter, fluids, and heat. Problems-solving in orientation, emphasizing the application of formulas, algebra, and trigonometry to physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TMNS approved Spring 2012.

Pre-reqs:

PHY121A

Educ/ Liberal Arts/ Math

English

ENG233 BRITISH LITERATURE:MED TO 1785

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers British literature from the Middle Ages to the early modern period. Students will read, discuss, and write about works by British authors in their historical and cultural contexts. Emphasis will be placed on the critical reading of the works and techniques used to analyze them. Course is TAG approved OAH055 effective Spring 2010. TMAH Approved effective Spring 2010.

Pre-reqs:

ENG124

Business/ Entrepreneurial

Business Mgt/Entrep

MGT227 OPERATIONS MANAGEMENT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course examines the concepts for designing, planning and improving manufacturing and service organizations. It covers many of the computational techniques applied to problems of efficiently converting inputs into outputs. The areas covered include: project management, forecasting, capacity planning, work measurement, quality and statistical quality control, supply chain, plant location, layout scheduling, materials management and maintenance. Upon completion , students should be able to demonstrate an understanding of operations management principles.

Pre-reqs:

Or ACC127

Engineering Tech

Engineering

Engineering Tech

Engineering

MET223 DYNAMICS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Methods are developed to analyze kinematics and kinetics of bodies. Practical derivations, equations, and applications of displacement, velocity, acceleration, work, energy, power, impulse, and momentum in both planar and rotational motion will be applied.

Pre-reqs:

MET124

Business/ Entrepreneurial

Business Mgt/Entrep

MGT221 SUPERVISION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is organized around the employee in order to emphasize the importance of working with others. Some specific areas covered are: the role of the supervisor, basic concepts of office functions, management of information, motivation, sources of power and authority, work simplification and group dynamics. Upon completion, students should be able to apply current management theory to situations that occur at the supervisory level.

Pre-reqs:

MGT121

Information Tech

Computer Security

IMT238 ADVANCED VIDEO PRODUCTION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course expands on the skills and techniques learned in Lighting & Cinematography. There will be more focus on the creation of HD video and DVD authoring. Student projects will be used to explore the latest techniques in the video industry. TAG approved Summer 2012 OCM010.

Pre-reqs:

IMT242

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

MST228 SHIELDED METAL ARC I

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Continuation of shielded ARC welding as it relates in vertical, overhead 45, and overhead positions, using E-6010 and E-7018 low hydrogen type electrodes.

Pre-reqs:

MST127

Health and Human Services

Physical Therapy

PTA124 MST PROCEDURES FOR PTA

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The student will learn data collecting and documentation for therapeutic measurement skills including goniometry and manual muscle testing.

Pre-reqs:

And PTA221

Information Tech

Computer Science

EET260 COMPUTER FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course presents computer crime investigations. Demonstrations and hands-on practice will reinforce topics such as computer crime, programming in the network monitoring platform, trap and trace techniques and patch level enumeration. Upon completion, the students will be able to provide detailed descriptions of computer crimes and understand the technology related to a response team.

Pre-reqs:

Or CAP121

Educ/ Liberal Arts/ Math

English

Educ/ Liberal Arts/ Math

English

ENG227 WRITING FOR MEDIA

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers writing for the following media: web, broadcast, and scriptwriting. Students examine basic issues of design and are introduced to stylistic and content requirements involved with creating media-specific text.

Pre-reqs:

ENG124

Engineering Tech

Engineering/Applied

EUT224 SUBSTATION TECHNOLOGY III

Credit Hours: 6 Contact Hours: 10 Lecture Hours: 2 Lab Hours: 8 Other Hours: 0

The outcome of this intermediate course is electrical skills training, as applicable to the use and installation/maintenance of batteries, fuses, transformers, regulators according to Substation Preferred Practices. It also provides the knowledge and skill to safely perform maintenance in electrical substation and switchyards; understand and apply the proper cable pulling/bus work techniques; installation of substation conductors/wire, switches and grounding techniques. An in-depth study and practice of lockout-tagout procedures is applied. The daily maintenance procedures are honed for substation power transformers; such as TTR testing, TCG/O2 testing, oil dielectric testing DGA sampling according to Substation Practices. Battery Impedance Testing is also included in this course.

Pre-reqs:

EUT124

Health and Human Services

Health Information

HIT224 QUALITY MGT IN HEALTHCARE

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Components of quality management in healthcare including quality assessment and improvement; utilization review; risk management and credentialing; use of quality improvement tools and techniques to assess, monitor, and report performance improvement activities; accreditation and regulatory requirements; outcome measures and patient safety.

Pre-reqs:

HIT222 Can be Taken Concurrently

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC223 COST ACCOUNTING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course places an emphasis on manufacturing and service organizations. Course coverage includes job-order costing, process costing, activity-based costing/activity-based management, standard costing and analysis of cost variances. Upon completion of this course, students should be able to apply the fundamental concepts of cost accounting to a variety of business decisions.

Pre-reqs:

ACC127

Engineering Tech

Engineering/Applied

AIT133 ADV ELECRICL APPS AND SFTY

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is designed specifically for non-electrical personnel looking to gain advanced knowledge of circuit analysis and an understanding of analog signals used for instrumentation devices. This course will also provide switching, programming logic controller (PLC), and basic logic concepts and fundamentals of computer based systems.

Pre-reqs:

AIT131

Business/ Entrepreneurial

Automotive

AUT181 INTRO TO CAT LIFT TRUCKS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The purpose of this course is to provide the student with an understanding of the skills and procedures needed to accurately diagnose and repair CAT lift trucks. This course introduces the student to the Caterpillar Lift Truck (CLT) Program and the different methods of instruction that will be used throughout the program. The course text is divided into small modular sections making it easy for the student to absorb and apply the information in a logic manner. Each student will be issued a user name and password to gain access to the CAT Learning Resources Website which contains computer-based training modules (CBT). This course will introduce students to the basics of fork lift trucks, their operation and an overview of the fork lift industry. Students will receive an introduction to CAT Lift Trucks, its history and the formation of the joint venture with MCFA. Each section ends with a student self-assessment worksheet covering the main topics in that section.

Pre-reqs:

AUT121

Business/ Entrepreneurial

Automotive

AUT184 CAT HYDRAULIC SYSTEMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The purpose of this course is to provide the student with an understanding of the skills and procedures necessary to accurately diagnose and repair hydraulic systems used on lift trucks. It covers basic and advanced theories and how these theories apply to lift truck hydraulic systems. The student will be able to identify components and explain their operation. The course also includes a brief description of industry standard symbols. The course will also cover safety-related tasks before attempting to service the hydraulic system. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. The course concludes with a description of routine maintenance procedures, troubleshooting guidelines, and a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121

Engineering Tech

Engineering

CET228 SURVEYING II

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Course covers methods and procedures for establishing line and grade for construction. Circular, spiral and parabolic curves, earth volume determination, cross-sectioning methods and advanced construction staking methods are also covered. The student is also introduced to electronic total stations and data collection. Use of the computer will be emphasized. This course is Ohio TAG approved. OET015 effective Summer 2008.

Pre-reqs:

CET227

CET233 ARCHITECTURAL DESIGN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

The basics of design will be examined while solving architectural design problems. The student will be required to prepare preliminary design drawings that fully express the intended solution.

Pre-reqs:

And CET123

Engineering Tech

Engineering

CET234 A/E CAD

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Building on the concepts learned in Basic AutoCAD, this course is designed to explore the production of architectural working drawings using software designed specifically for the architectural/engineering disciplines. Students will produce a variety of architectural working drawings on the computer-aided drafting system.

Pre-reqs:

And DET125

Sciences

Chemistry

CHM122 GEN/ORG AND BIOL CHEMISTRY II

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The course examines the structures, names, reactions and physical properties of the major groups of organic and biological compounds including alkenes, alkynes, aromatics, alcohols, ethers, aldehydes, ketones, carboxylic acids and esters and biological compounds including carbohydrate lipids, proteins and nucleic acid molecules. Basic metabolic reactions, including dehydration synthesis, hydrolytic digestion and biooxidations are described. Laboratory exercises demonstrate the properties and reactions of the compounds studied in lecture. TMNS Approved Effective Autumn 2008.

Pre-reqs:

CHM121

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM123 SMALL GROUP COMMUNICATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the role of the individual in small social and working groups. The emphasis is on communication verbal and non-verbal to become a group member capable of participation, problem-solving, and leadership. TAG approved course- OCM003 effective Summer 2007.

Pre-reqs:

ENG124

Engineering Tech

Engineering

Engineering Tech

Engineering

DET223 KINEMATICS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course covers motion of mechanisms. Machine displacement, velocity and accelerations are studied in detail. Using graphical, analytical and numerical approaches, various machine elements are analyzed and designed. The course relates theory learned in the first year with practical machine design applications. PC software programs and spreadsheets are used to verify design solutions

Pre-reqs:

PHY121

DET230 ADVANCED AUTOCAD (INVENTOR)

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An introduction to solid modeling using Autodesk's Inventor and the tools and commands to complete fully parametric three-dimensional parts, assemblies, presentations, and two-dimensional drawings. The student must have an understanding of computer-aided and mechanical drafting.
TAG approved Summer 2012 OET021.

Pre-reqs:

DET125

Information Tech

Computer Security

IMT254 PORTFOLIO DEVELOPMENT-IMT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This capstone course will focus on developing and completing complex print design projects and a portfolio. These projects are used to assess the students competencies and proficiencies acquired in the program. A portfolio is required.

Pre-reqs:

IMT244 Can be Taken Concurrently

Information Tech

Computer Security

HLS221 TERRORISM AND HOMELAND DEFENSE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course acquaints the student with major issues in global terrorism, from the history and development of terrorism through the psychology, financing, structure, and dynamics of terrorist groups. The course also includes a focus on legal issues and terrorism of the future.

Pre-reqs:

HLS122

Health and Human Services

Dental Hygiene

DAS125 DENTAL ASSISTING SPECIALTY

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course offers the dental assisting student practical experience and knowledge in one of three common specialty areas.
Option A: Clinical Practice
This specialty option provides the student with an opportunity for practical application of dental principles and skills of basic qualified personnel.
Option B: Community Dentistry
This specialty option provides the student with an opportunity for advance knowledge and practice in preventative dental services and public health dentistry.
Option C: Administrative Dental Personnel
This specialty option is designed to provide the student with an opportunity to learn basic administrative and business procedures common in the dental practice.

Pre-reqs:

Although each student will select one major area of focus, it is expected that each student will gain knowledge of all major fields through discussion and clinical experience.

DAS123

Business/ Entrepreneurial

Business Mgt/Entrep

MKT236 E-MARKETING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The new processes and new media that have been ushered in by the electronic age are studied in the context of more traditional marketing practices. Marketing to consumers as well as other organizations and finding sources of information virtually are considered. This course examines the theory, application, and strategies of electronic marketing. It will examine the use of web pages in marketing ideas, goods, and services in "e-commerce". This course will also cover the skills and knowledge to develop and implement e-commerce marketing activities for businesses conducting transactions in an online environment.

Pre-reqs:

Business/ Entrepreneurial

Business Mgt/Entrep

MKT236 E-MARKETING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The new processes and new media that have been ushered in by the electronic age are studied in the context of more traditional marketing practices. Marketing to consumers as well as other organizations and finding sources of information virtually are considered. This course examines the theory, application, and strategies of electronic marketing. It will examine the use of web pages in marketing ideas, goods, and services in "e-commerce". This course will also cover the skills and knowledge to develop and implement e-commerce marketing activities for businesses conducting transactions in an online environment.

Pre-reqs:

MKT121

Engineering Tech

Engineering

CET239 BUILDING CODE APPLICATION

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Commercial building and residential building codes are studied to become familiar with the general intent of the codes in selected areas and how they relate to the construction industry. Special attention is paid to portions of the code that are typically a problem to code officials in the prosecution of their duties.

Pre-reqs:

And CET237

Business/ Entrepreneurial

Accounting/Finance

FIN220 BUSINESS FINANCE

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers topics such as management and analysis of short and long-term assets and equities, their costs and their utilization in optimal corporate financial structures. Upon completion of this course, the student should be able to estimate a firm's cost of capital and discuss the risks and costs associated with the various forms of financing in a corporate setting.

Pre-reqs:

ACC133

Engineering Tech

Engineering

Engineering Tech

Engineering

EET123 ELECTRONC DEVICES AND CIRCUITS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Theory, characteristics and applications of solid-state devices. Devices covered include: diodes, bipolar junction transistors, field effect transistors, operational amplifiers, analog and digital voltage regulators.

Pre-reqs:

Or EST130

Information Tech

Administrative Srv Off Applion

IRT233 TRANS & EDITING FOR SCOPISTS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will learn transcription, editing, and research skills specific to the scopist/reporting profession. Instruction utilizing online, computer-aided transcription technology, with emphasis on note reading, translating and editing skills, grammar and proofreading skills, research techniques, and globalizing steno entries. Upon completion, student should be able to read, translate, edit, globalize steno outlines, and print for transcription production.

Pre-reqs:

And IRT229

IRT231 JUDICIAL PROCEDURES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Introduction to the responsibilities of the judicial reporter in the court system and the freelance environment; legal procedures; reporting techniques; and realtime reporting. Instruction in transcript production; court and transcript forms; researching for transcript production; marking and maintaining exhibits; realtime reporting in a deposition and court environment; the profession and related job opportunities; ethics, including the distribution of the NCRA Code of Professional Ethics; and professional associations. Upon completion, students should be able to demonstrate knowledge in all areas of the responsibilities of the judicial reporter.

Pre-reqs:

IRT122

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM125 INTRO TO COMMUNICATION THEORY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide students with a survey of the basic elements of communication in a variety of contexts including interpersonal, group, organizational, intercultural, and mass media. Analysis and application of communication theories is emphasized as well as the study of current communication theory research. This course is Ohio TAG approved. OCM001 effective Summer 2008.

Pre-reqs:

Or Test & Score: ACT Composite - 22

Engineering Tech

General Engineering

CET238 TECH PROJECT-CIVIL ENGINEERING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will apply knowledge acquired from technical courses to work in an interdisciplinary team and complete a comprehensive Civil-Surveying projects. (Bridge-Roadway projects, Construction staking-Superstructure design, Volume calculations-Retaining Wall design) The scope will include research, calculations, CAD drafting, mapping, a report and presentation.

Pre-reqs:

Or CET228

Information Tech

Computer Security

IMT260 LIVE SOUND

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Live Sound Technology studies the needs of audio reinforcement for the music venue. The student will study all aspects of live sound through advanced discussions and implementation of mixers, processors, and amplifiers in a lab-based environment. Upon completion, the student will be able to analyze music production needs and set-up and operate a sound system.

Pre-reqs:

IMT129

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

MST136 3G WLDG CERT EXAM PREP

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course will study the fit-up and joining of various schedules of pipes in all positions. The plate will be jointed using SMAW, GMAW, and GTAW. The course will also cover weld defects and their causes. Heat Affected Zone and Fusion Zone will be discussed. Students will perform various destructive tests per American Petroleum Institute (API) and American Society of Mechanical Engineers (ASME) codes.

Pre-reqs:

MST127

And MST128

Sciences

Chemistry

CHM243 BIOCHEMISTRY I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the biochemical mechanisms involved in chemistry of amino acids and proteins, human immune system, catalysis and enzymes, carbohydrate and glycogen metabolism, lipids and biological membranes, and energetics of metabolic reactions.

Pre-reqs:

Or CHM141

Biology

BIO221 PRINC OF MICROBIOLOGY

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course examines microbial structure and function with particular emphasis on medical microbiology. Content includes taxonomy, identification procedures, microbial growth and control, microbial genetics and the epidemiology of common infectious diseases. The laboratory experiences include staining, culturing and aseptic techniques, as well as various diagnostic procedures. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or BIO123

Information Tech

Computer Science

Information Tech

Computer Science

CIS221 GENERATING RPTS DECSN MAKING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides students with exposure to various tools used to connect to databases, retrieve and modify raw data, and then generate various types of reports. Topics will include, but not limited to, the generation of various types of reports and extensive use of pivot tables, calculations, program logic, and SQL statements. Upon completion of this course, students will be able to use a variety of software tools to manipulate data and generate meaningful reports.

Pre-reqs:

ECA253

Health and Human Services

Medical Lab

MLT222 CLINICAL CHEMISTRY

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3.5 Lab Hours: 3.5 Other Hours: 0

The course is designed to introduce the student to the principles of laboratory instrumentation, clinical chemistry procedures and quality control concepts. The course covers renal and liver function; carbohydrate, lipid and protein metabolism; hormones; electrolytes and mineral balance; blood gases; and clinical enzymes and therapeutic drug monitoring. The class uses lecture, case studies and laboratory procedures.

Pre-reqs:

And MLT122

Information Tech

Computer Science

WDD121 INTERNET/INTRANET DES & DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, fundamentals of web design, and the HTML and CSS markup languages will be studied. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a static website.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Information Tech

Computer Science

WDD227 ADV WEB DEV W PHP AND MYSQL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An advanced course in PHP and MySQL focusing on web database integration. Learn more advanced techniques such as image/file uploads and AJAX integration and develop a complete content management system in PHP and MySQL.

Pre-reqs:

Or WDD226

WDD231 FLASH ACTIONSCRIPTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on using Flash for web site creation. The student learns to use actionscripting to interact with Flash, load external data and create complex sites using components. Hans-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or CSE122

Health and Human Services

Physical Therapy

PTA224 PTA PROCEDURES II ORTHO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected orthopedic, integumentary, rheumatological and cardiovascular conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

And BIO124

Sciences

Physics

Sciences

Physics

PHY222 GEN PHYSICS II W CALC

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

Study of electricity, magnetism, light, optics, and modern physics. Problem solving in orientation, emphasizing the application and derivation of formulas using calculus for physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TAG approved Spring 2013 OSC017

Pre-reqs:

And MTH224

Business/ Entrepreneurial

Automotive

AUT124 VEHICLE CHASSIS SYSTEMS

Credit Hours: 4 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This course is designed to give the student an in-depth knowledge of today's automotive steering, suspension and braking systems. Operational theory will be reinforced by laboratory periods which will allow the student to gain hands-on experience in diagnosing malfunctions, performing routine maintenance, and in making adjustments and repairs to these systems. Subjects such as vehicle four wheel alignment and base braking systems servicing will be covered. Quality work methods used when diagnosing, adjusting and repairing these safety-related systems are stressed. CTAG approved CTAUT001 and CTAUT004.

Pre-reqs:

AUT121 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

AOT129 KEYBOARDING/SKILLBUILDING

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course is designed to give students an opportunity to further develop and refine keyboarding skills. Emphasis on drill work is to improve keyboarding speed and accuracy on a microcomputer. Upon completion, students should be able to diagnose their specific areas of weakness on the keyboard and improve both speed and accuracy.

Pre-reqs:

AOT121

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

MST131 STATS PROCESS CTRL CHART

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will introduce students to the concepts of variation and defect prevention. Students will learn the formulas and the correct application of control limits for variable and attribute control charts as well as how to plot data and apply basic detection rules for process control.

Pre-reqs:

MTH101

Information Tech

Computer Security

NET246 MICROSOFT NETWORKING III

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course covers configuring advanced Microsoft server services. Students will master skills necessary to administer an infrastructure in an enterprise environment. Topics include implementing advanced network services, advanced file services, dynamic access control, network load balancing, failover clustering, and disaster recovery.

Pre-reqs:

NET244

NET264 UNIX/LINUX SYS ADMIN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers administration and configuration of UNIX and/or LINUX operating systems. Topics include: adding/maintaining user accounts, bootup, shutdown, runlevels, daemons, backup and restoring files, basic network configuration, policies and ethic, process control, file systems, log files. During the lab, the student will install LINUX on a personal harddrive and be the administrator of their personal system. Students will add users, schedule cron jobs, add file systems to their system, etc.

Pre-reqs:

NET220

Information Tech

Computer Security

NET265 UNIX/LINUX SHELL SCRIPTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn how to combine standard UNIX commands and utilities together in Bourne style shell scripts for automation of system administration tasks and data manipulation and reporting. Emphasis is on redirection, looping, command substitution, redirection, process control and regular expressions. Other topics addressed include database interaction, various markup languages (LateX and HTML), perl, awk, and sed scripting.

Pre-reqs:

NET220

NET266 UNIX/LINUX NETWORK ADMIN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses administration and configuration of network server software found on the UNIX and/or LINUX operating systems. Students will install a LINUX server of their personal hard drives, setup various types of network servers. Many labs will require students to work together to test each other's server configurations Server topics include: DNS, xinetd, electronic mail, network file sharing, etc. Security topics include: iptables, PAM, tripwire and tiger.

Pre-reqs:

NET220

NET280 WEB SERVER ADMINISTRATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the installation and configuration of the Apache web server and the server handware that supports it. Demonstrations and hands-on practice will reinforce topics such as virtual hosts, authentication, virtual domains, CGI, PHP, and SSL. Upon completion, students will be able to administer the hardware and operating environment of web servers.

Pre-reqs:

NET264

Or NET266

Or ECA276

Information Tech

Computer Security

CFS258 CYBER FORENSCS AND DATA RECRVY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course presents methods to properly conduct a computer forensics investigation while mapping to the objectives of the International Association of Computer Investigative Specialist (IACIS) certification. Demonstrations and hands-on practice will reinforce topics such as finding evidence in file metadata, analyzing partitions and data structures, and identifying hidden data on a disk's Host Protected Area. Upon completion, the students will be able to gather evidence from disk images document findings.

Pre-reqs:

CFS257

CFS176 ONLINE INVESTIGATION RESOURCES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide the student with knowledge, techniques and tools to gather information from various online resources that are available in the public domain that can assist in the process of conducting various types of investigations.

Pre-reqs:

CFS137

Health and Human Services

Medical Lab

MLT226 MLT DIRECTED PRACTICE

Credit Hours: 6 Contact Hours: 30 Lecture Hours: 0 Lab Hours: 30 Other Hours: 0

Students are assigned to an affiliated clinical laboratory and have the opportunity to perform clinical laboratory testing using modern equipment, under the supervision of a practicing laboratorian. Students rotate through the main laboratory departments which include: hematology and hemostasis, blood bank, microbiology, chemistry. Experiences include operating and maintaining sophisticated laboratory analyzers, evaluation of test results, refining phlebotomy skills, interaction with the clinical laboratory staff, with other health care professionals, and with the patient.

Pre-reqs:

MLT225 Can be Taken Concurrently

Information Tech

Computer Security

Information Tech

Computer Security

CFS258 CYBER FORENSCS AND DATA RECRVY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course presents methods to properly conduct a computer forensics investigation while mapping to the objectives of the International Association of Computer Investigative Specialist (IACIS) certification. Demonstrations and hands-on practice will reinforce topics such as finding evidence in file metadata, analyzing partitions and data structures, and identifying hidden data on a disk's Host Protected Area. Upon completion, the students will be able to gather evidence from disk images document findings.

Pre-reqs:

Or ECA257

CFS281 ADV DIGITAL MEDIA FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The student will learn advanced techniques to gather date from digital devices focusing on data maintained in system memory and recovery of this data using live acquisition tools and techniques.

Pre-reqs:

Or CFS258

Engineering Tech

Engineering

CET227 SURVEYING I

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

The student is given practical experience in the use of the various surveying instruments while learning how to measure distances, angles and elevations. Methods of determining error of closure, coordinates and area for a property survey are discussed, as well as construction surveys.

Pre-reqs:

MTH125 Can be Taken Concurrently

Engineering/Applied

Engineering Tech

Engineering/Applied

MST123 HYDRAULC AND PNEUMATIC APP

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course deals with the study of hydraulic applications, types of circuits used, how to pipe the various systems and how to troubleshoot the hydraulic/pneumatic circuits.

Pre-reqs:

MTH101

Engineering

CET232 LAND PLANNING AND DESIGN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course covers the study of site capabilities and potentials as they relate to land planning and subdivision design. Students will complete preliminary layouts for projects such as industrial parks, housing allotments, planned unit developments and commercial home sites in accordance with zoning and subdivision regulations.

Pre-reqs:

CET122

Health and Human Services

Massage Therapy

MAS224 MASSAGE THERAPY III

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

In this course the students continue to study the practice of Massage Therapy in both a general and clinical setting.

Pre-reqs:

MAS122

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH221 CONCEPTS OF CALCULUS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A study of the theory and techniques of analytic geometry, differential and integral calculus, including variables, functions, limits, differentiation, integration and applications of the derivative and integral.

Pre-reqs:

And MTH130

Or MTH125 Can be Taken Concurrently

Engineering Tech

Engineering/Applied

MST122 HYDRAULC AND PNEUMATIC PRI

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The study of fluids, their properties, behavior and applications. Topics cover compressible and incompressible fluids, viscosity and basic hydraulic and pneumatic pumps, actuators, valves and piping used.

Pre-reqs:

MTH101

And MST123 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

MTH130 TRIGONOMETRY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Study of angles and degree measure; radian measure; arc length and area; angular and linear velocity; trigonometric functions; right angle trigonometry; trigonometric identities and reference angles; unit circle and graphing; general sine wave; graph of tangent function; inverse trigonometric functions; basic sine, cosine and tangent equations; multiple angle equations; vectors and their applications; oblique triangles and their applications; polar coordinates and complex numbers.

Pre-reqs:

MTH125

Educ/ Liberal Arts/ Math

Mathematics

MTH223A ANALYTIC GEOMETRY-CAL I A

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of analytic geometry, limits, continuity, derivatives, tangent and normal lines, derivatives of trigonometric functions and related rates. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the value of a derivative at a given point. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

MTH135

Business/ Entrepreneurial

Accounting/Finance

ACC132 FINANCIAL ACCOUNTING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces the student to the fundamental processes of accounting through coverage of the accounting cycle consisting of transaction analysis, the recording function and financial statement preparation and analysis. Course coverage continues with a review of receivables; inventory, property, plant and equipment; bonds and stockholder's equity. Emphasis is given to why certain procedures are followed and their financial statement impact. Students may elect to take ACC121, Principles of Accounting, as an introduction to accounting prior to taking this course. TAG approved course-OBU001 effective Fall 2005.

Pre-reqs:

BUS123

Information Tech

Administrative Srv Off Applion

AOT232 AOT PRACTICUM

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 1 Lab Hours: 7 Other Hours: 0

Students work a total of 105 hours for businesses outside of the college or for college faculty and/or staff. Weekly instructor-guided activities are part of this course, which may include required class attendance. Upon completion, students should be able to demonstrate proficiency in administrative tasks and skills in a work environment.

Pre-reqs:

Or AOT237

Computer Security

Information Tech

Computer Security

IMT129 DIGITAL AUDIO RECG AND EDITING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The student will learn how to record, edit, and design with audio through a combination of lecture, lab, and student projects. Upon completion of this course, the student will be able to design, capture, and create audio for a variety of media including TV, web, and CD.

Pre-reqs:

Health and Human Services

Physical Therapy

PTA228 SEMINAR I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Presentation of topics related to clinical practice to include ethics and professional development.

Pre-reqs:

PTA124

PTA229 DIRECTED PRACTICE I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Clinical experience in various physical therapy departments under direct supervision. Grading: Credit/Fail

Pre-reqs:

And PTA225 Can be Taken Concurrently

Information Tech

Computer Science

Information Tech

Computer Science

CIS121 HELP DESK AND COMP SUP CONCEPT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides the student with essential topics covering help desk operations, roles and responsibilities of the analysts, help desk processes and procedures, tools and technologies, performance measures, and the help desk setting itself. There are numerous hands-on projects to practice implementing help desk concepts in a real world situation. Upon completion, students will have a skills to explore in greater detail various helpdesk tools, situations, and user conflicts and resolution.

Pre-reqs:

Or Test & Score: ACT Reading - 18

CSE122 PROGRAMMING LOGIC & PROB SOLV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with structured programming principles through awareness and application of structured programming and object-oriented concepts and techniques. Upon course completion, the student should have an understanding of how to develop the logic to solve a programming solution using structured flowcharts and psuedocode.

Pre-reqs:

Or Test & Score: ACT Reading - 18

CSE122A PROGRAMMNG LOGCI & PROB SOLV A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with algorithm development, variables, sequential statements, and conditional statements. Upon completion students should have an understanding of the following concepts: algorithms, variables and data types, basic sequential statements, conditional logic and how to use them in program coding.

Pre-reqs:

IDS102

Information Tech

Computer Science

CSE231 JAVA PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to the Java programming language. The course will cover the fundamentals of Java such as Java data types, control structures, classes, methods, and arrays. Upon successful completion of this course, students will learn how to create and execute Java programs.

Pre-reqs:

Or CSE122

CSE231A JAVA PROGRAMMING A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to software programming logic and problem-solving techniques using the Java programming language. ECA223A requires you to install the Java Development KIT(JDK) on your home computer or have access to computers somewhere else which have the JDK installed. Sequential, conditional and repetitive logic constructs are central topics.

Pre-reqs:

Or CSE122

CSE227 WINDOWS PROGRAMMING WITH C#

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course the student will learn to design, create, test, deploy, maintain and support desktop software applications using Microsoft's C#.Net. The student will complete a series of hands-on lab exercises using C#. This class will help prepare the student Microsoft's MCTS certification exam. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA127

Computer Security

Information Tech

Computer Security

IMT239 MUSIC SYNTHESIS I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The focus of this course is to provide students with the opportunity to develop portfolio level work in the multifaceted areas of music synthesis. The course will provide both a theoretical and practical knowledge of music synthesis. The practical knowledge will be attained by completion of various projects which encompass all the core functions of music synthesis professionals.

Pre-reqs:

IMT247

Business/ Entrepreneurial

Accounting/Finance

ACC228 BUSINESS TAXATION

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course examines the principles of taxation of C-Corporations, S-Corporations and Partnerships contrasting the traditional taxable entities with flow-through entities. Students complete tax returns for all three types of entities to gain practical, applied knowledge. In addition, complex analysis of basis and various types of gains and losses is performed as well as extensive study of cost recovery. Upon completion of the course, the student should be able to analyze complex tax scenarios of the various forms of a business entity and determine their impact on the entity's liability.

Pre-reqs:

ACC132

Information Tech

Administrative Srv Off Applion

AOT129 KEYBOARDING/SKILLBUILDING

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course is designed to give students an opportunity to further develop and refine keyboarding skills. Emphasis on drill work is to improve keyboarding speed and accuracy on a microcomputer. Upon completion, students should be able to diagnose their specific areas of weakness on the keyboard and improve both speed and accuracy.

Pre-reqs:

Or OAD121

Computer Science

Information Tech

Computer Science

CPD222 MCRSFT SQL SERVER DTBSE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server. Through a system of lessons and hands-on exercises students will gain practical experience using Transact-SQL and Data Transformation Services (DTS) to manipulate data; programming business logic using stored procedures, transactions, triggers, user-defined functions, and views; optimizing database performance by using SQL Profiler and the Index Tuning Wizard; and Managing security--data access, object-level security, and application roles. As students build these real-world database skills, they will also be prepared for the corresponding Microsoft (MCITP) certification exam.

Pre-reqs:

ECA253

CPD122 ORACLE DTBSE: INTRO TO SQL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces Oracle Database technology and the relational database concepts and the powerful SQL programming language. This course provides the students with the essential SQL skills of querying the database, the meta data and creating database objects. This course is designed to prepare you for the corresponding Oracle Certified Professional exam. Demonstrations and hands-on practice reinforce the concepts. Upon completion, the student should have the confidence and skill to develop, maintain and utilize SQL scripts and code.

Pre-reqs:

ECA253

CPD225 DATA MINING AND DATA WARHOUSNG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides a thorough practical coverage of the techniques used to build a warehouse including requirements definitions, extract-transformation-loads of data, query applications and executive information systems. Additionally, data mining algorithms and techniques that identify expected and unexpected trends in data stored in a warehouse will be covered. Upon completion students will be able to design, implement and use a data warehouse and use data mining tools to analyze and identify patterns in data.

Pre-reqs:

ECA253

Information Tech

Computer Science

WDD122 WEB GRAPHICS DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers creating and editing backgrounds and graphics for use on the internet. Students will learn appropriate design skills and techniques, design language and study color relationships through demonstrations and hands-on practice in order to reinforce the concepts as they use various leading edge technologies to create graphics. Upon completion of this course, students will be able to analyze web graphics and design; develop web graphics; optimize images for the web and understand the concepts of design as they relate to the web.

Pre-reqs:

ECA228

Health and Human Services

Human Services

CDC231 CHEM DEPEND PRACT & SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 14 Other Hours: 0

This course provides the student with the clinical experience in an agency that offers services to persons with substance abuse/dependency disorders and adheres to the practice of the 12-core functions of a chemical dependency counselor. The student participates primarily in assisting with screening, orientation, assessment, counseling, case management, record keeping, crisis intervention, and identifying areas for referral. Students provide a variety of community support services related to substance abuse/dependency. Students are required to attend a weekly seminar to process the clinical experience.

Pre-reqs:

SWK224

Educ/ Liberal Arts/ Math

Mathematics

MTH125 COLLEGE ALGEBRA

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will study linear, quadratic and absolute value equations and inequalities by applying analytical, graphical, and numerical methods of solution. Elementary functions and non-functions will be examined with reference to extrema, roots (zeros) and end-behavior of their respective graphs. Theory of equations including the Remainder and Factor Theorems, The Rational Root Theorem, and Descartes' Rule of Signs will be used for non-graphical analysis of polynomial functions of degree n. The student will also study exponential and logarithmic functions and the conic sections including their graphs and applications. Systems of equations will be solved by traditional algebraic methods as well as by the application of matrix algebra including determinants. These methods will be extended to include the partial fraction decomposition of rational expressions. TMM001 approved Spring 2012.

Pre-reqs:

Or Test & Score: M094 Transfer Prof/Placement - 2

Health and Human Services

Health and Human Services

Nursing

NUR122 NURSE CARE CHILDBEAR FAM

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

This course focuses on nursing care of the child-bearing family. New trends in maternity-child nursing are included. CTAG CTADNUR002 approved Spring 2012.

Pre-reqs:

BIO122

And CHM122

And NUR221

NUR221 NUR CARE PERSON/ALT I

Credit Hours: 6 Contact Hours: 12 Lecture Hours: 3 Lab Hours: 9 Other Hours: 0

This course introduces the nursing care of persons with alterations in health, with continued emphasis on technical nursing skills. The peri-operative experience is also introduced. The health care needs of the young and middle adult are examined. CTAG CTADNUR002 approved Spring 2012.

Pre-reqs:

BIO121

And PSY121

NUR223 NUR CARE PERSON/ALT III

Credit Hours: 8 Contact Hours: 14 Lecture Hours: 3 Lab Hours: 11 Other Hours: 0

This course continues to develop the knowledge base necessary for nursing practice. Initially, the course focuses on the nursing care of clients with more complex and acute health problems. Emergency nursing principles are introduced. Management concepts, the organization as a system and the nurse as a manager of client care are subsequently addressed. Application of these concepts is facilitated through a preceptorship. This directed nursing practice will assist in role transition from student to beginning associate degree nurse.

Pre-reqs:

And NUR224 Can be Taken Concurrently

Fire and EMS

Health and Human Services

Fire and EMS

EMS221 PARAMEDIC II/SEMINAR

Credit Hours: 9 Contact Hours: 11 Lecture Hours: 8 Lab Hours: 3 Other Hours: 0

This course is second in a four-course sequence. Content in the sequence follows the objectives for paramedic education according to the Ohio Administrative Code 4765 and includes the knowledge and skills required to perform patient assessment and management of medical and traumatic emergencies by performing rapid assessment, interpretation of data and advanced intervention, for patients of all ages from neonates to geriatrics. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

EMS122

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM229 PERSUASION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides a foundation in the application of theories, principles, and strategies of social influence in a variety of contexts. Empirical investigations of persuasion, social influence, and compliance-gaining will be studied, in addition to strategies and techniques of persuasion and persuasion resistance relating to a wide variety of real-life communication contexts.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Information Tech

Administrative Srv Off Applion

AOT132 RECORDS MANAGEMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an introduction to the fundamentals of a records and information management program. Emphasis is placed on learning and applying standard rules for alphabetic storage and retrieval; including the subject, numeric, and geographic filing methods. Also covered are basic concepts of a records management program and its system components as well as current electronic trends. Upon completion, students should be able to demostrate an understanding of the components of a records management program and competence in applying the generally accepted standard filing rules.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

BUS221 MICROECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An in-depth study of microeconomic concepts and principles such as supply and demand, price elasticity, production costs, different market structures, income distribution, marginal analysis, and other issues relating to global economics. Upon completion of this course, students should be able to demonstrate an understanding of these topics and be able to apply them to business. TAG OSS004 approved Spring 2012. TMSBS approved Spring 2012.

Pre-reqs:

IDS102

ENT223 ENTREPRENEURSHIP PRACTICUM

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This is the capstone experience where the student puts their business plan intro practice. The student will work with mentors to start to apply their entrepreneurial knowledge to real life situations. This course is based on the concept of balanced mentorship, which benefits both the student and the entrepreneur mentor. Students will be assigned to a start up firm in our Center for Entrepreneurial Studies to apply classroom knowledge to an actual work situation.

Pre-reqs:

BUS121 BUSINESS ADMINISTRATION

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

A survey course designed to develop a comprehension of business theories and principles. Students will examine the following: American business development, management and organization, human resources, marketing, information for business strategy, decision making, finance and investment. Upon completion, students should be able to demonstrate an understanding of the above topic areas and have a foundation for studying other business subjects.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

PSY222 Psy Aspect of Therapy

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Covers the general principles of interaction with a specific focus on those unique challenges confronting the patient and the health care provider. Attention is given to the psychosocial needs of both the patient and the health care provider. Issues of communication, patient-provider relationships, patient dependency, personal values, and relating to people from differing cultures, ages, and special needs are discussed.

Pre-reqs:

Or IDS102

SOC121 SOCIOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduces the general theories of the field, and research methods. Students will examine the impact of culture, social interaction, social structure, socialization, and social institutions on social behavior.

Pre-reqs:

Or Test & Score: Compass Reading - 080

PSY121 GENERAL PSYCHOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Surveys the scientific study of behavior, addressing a wide range of traditional topics including introduction and research; perception; consciousness; learning; cognition; personality; pathology/treatment; development; biological basis of behavior; social and organizational psychology. Emphasizes classical and current theory and research with selected attention to practical application.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Or IDS102

Or IDS102

Health and Human Services

Health Information

Health and Human Services

Health Information

HIT223 HIM SUPERVSN:CONCPTS AND PRACT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduction to the concepts and practices of management and the role of the supervisor as it relates to the Health Information Management department; strategic planning and developing goals and objectives; importance of leadership and working in teams; orientation and training; monitoring resources and budgeting; study of practical problems in supervision.

Pre-reqs:

And ENG222 Can be Taken Concurrently

Human Services

CDC222 FUND OF CHEM DEP PRACT II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides students with advanced individual and group strategies to match the needs of clients. Students develop knowledge to evaluate the effectiveness of treatment based upon the client's progress towards mutually agreed upon goals. Stuents learn to develop a continuum of recovery plan in order to strengthen the client's potential for obtaining and maintaining a healthy lifestyle. Students develop knowledge and skills to work effectively with specific populations such as women, adolescents, and persons with co-occurring disorders.

Pre-reqs:

CDC122

SWK231 HUMAN & SOCIAL SERVCE PRAC/SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

A 210-hour, supervised experience working in selected Human and Social Services agencies. Open only to Human and Social Service majors. Weekly seminar participation required.

Pre-reqs:

SWK224

Educ/ Liberal Arts/ Math

Education

Educ/ Liberal Arts/ Math

Education

EDU130 INTRO TO THE TEACHING PROFESSN

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This survey course is an introduction to the teaching profession. Students engage in a variety of experiences that broadly explore the purposes of schools in society and the knowledge, dispositions, and performances required to be an effective teacher today. Ten observation hours required. TAG approved course OED001, effective Summer 2013. CTAG approved course CTED001, effective Summer 2013.

Pre-reqs:

Or ENG011

Health and Human Services

Medical Lab

MLT225 MLT APPLICATIONS

Credit Hours: 3 Contact Hours: 9 Lecture Hours: 0 Lab Hours: 9 Other Hours: 0

Under supervision of MLT Program faculty, the student has the opportunity to practice the manual procedures from the previous MLT courses. In preparation for the affiliated hospital experience, the student will organize his/her daily workload to maximize productivity and attain competence in the manual methods. Emphasis is placed on manual hematology, normal and abnormal blood smears, routine urinalysis, body fluid cell counts and cytospins, routine serology, blood banking using tube and gel techniques.

Pre-reqs:

And MLT125

Business/ Entrepreneurial

Accounting/Finance

ACC241 CMA EXAM PART 2 REVIEW COURSE

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers all of the topics that are tested on Part 2 of the Certified Management Accountant (CMA) Exam. Topics include planning, budgeting and forecasting; performance measurement; cost management; internal controls; and professional ethics. Upon successful completion of this course, the student should be prepared to sit for part 2 of the CMA exam.

Pre-reqs:

ACC223 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

PSY122 PSYCHOLOGY OF ADJUSTMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Examines selected concepts from various areas of psychology relating to adaptation to change. Adjustment is concerned with understanding how individuals react to changing life situations and how to enhance skills for effectively interacting with others. TMSBS approved Spring 2012.

Pre-reqs:

PSY121

PSY229 PSYCHOLOGICAL METHODS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course serves as the keystone experience for those pursuing the Associate of Arts in Psychology. This course synthesizes previous course work to allow the student an opportunity to demonstrate understanding and competency of broad psychological concepts. Additionally, students are provided the opportunity to apply this understanding through exploring concepts of interest within the field by conducting and producing an empirical study. Systematic guidance is provided throughout the course to assist students in understanding the process.

Pre-reqs:

And PSY222

And PSY221

Information Tech

Computer Science

CSE121 MOBILE DEVELOP ARCHITECTURE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the overall methodologies of developing applications for mobile and handheld devices. The design, architecture, and techniques of mobile and handheld devices will be analyzed. Upon completion of the course, students should have an understanding of the mobile application development process.

Pre-reqs:

Or CSE122 Can be Taken Concurrently

Information Tech

Computer Science

WDD121 INTERNET/INTRANET DES & DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, fundamentals of web design, and the HTML and CSS markup languages will be studied. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a static website.

Pre-reqs:

And ITD100

Or Test & Score: Computer Test - 18

Health and Human Services

Dental Hygiene

DHY123 DENTAL RADIOGRAPHY

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course is designed to introduce the student to fundamental knowledge of radiographic principles and safety considerations. Skill development in image production, mounting techniques and radiographic interpretation is emphasized.

Pre-reqs:

DAS226 EXPANDED DENTAL ASSISTING I

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course will cover basic concepts in head, neck and basic dental anatomy, terminology, tooth physiology/morphology to suppor the restorative dental auxiliary functions. Additional topics include laws and ethics, ergonomics, instrumentation/application techniques, isolation, occlusion, dental materials (including amalgam, resins, bases/liners, and intra-coronal temporary materials/ procedures).

Pre-reqs:

Information Tech

Computer Science

Information Tech

Computer Science

WDD121 INTERNET/INTRANET DES & DEV A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, fundamentals of web design, the HTML markup language, and the CSS style sheet language will be studied. Specific topics covered include the basic HTML webpage, configuring text and color with CSS, adding images, and best practices in web design. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a basic static website.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Or Test & Score: ACT Reading - 18

Engineering Tech

Engineering

DET125 BASIC AUTOCAD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course begins with basics and gives students hands-on experience using personal computers to create engineering drawings with AutoCAD software. Topics include: basic components of a CAD system, overview of [Windows] operations, input methods, drawing setup and display, editing, dimensioning, text, layers, hatching, blocks and plotting. This course is Ohio TAG approved. OET012 effective Summer 2008. CTAG CTMET005 approved Spring 2012.

Pre-reqs:

Sciences

Chemistry

CHM101 INTRO TO CHEMISTRY

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

A problem-solving course to familiarize the student who has limited previous chemistry background with basic chemistry and mathematical skills. Course covers basic algebra skills, powers of ten (exponents), dimensional analysis, metric measurements and conversions, atomic theory, molecular structure, the periodic table and its uses, inorganic nomenclature, the mole concept, the gas laws and different types of solutions. The recitation portion of this class will involve pertinent problem-solving. TMNS Approved effective Autumn 2008.

Pre-reqs:

MTH123

Health and Human Services

Respiratory Therapy/MIST

Health and Human Services

Respiratory Therapy/MIST

MIS123 INTRO TO SURGICAL TERM/MCROBIO

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides the student with an exposure to terms specific to the field of central service/medical instrument sterilization with special emphasis on surgical terminology and microbiology pertinent to the surgical arena. Emphasis is placed on understanding the relation- ships between medical products and instruments, how they are used, and the factors in disease transmission that compromise surgical patient outcomes.

Pre-reqs:

MIS124

Educ/ Liberal Arts/ Math

Mathematics

MTH135 PRECALCULUS

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

Study of linear and quadratic equations, their applications; solving rational and radical equations; complex numbers; linear, polynomial and rational inequalities; equations and inequalities involving absolute value; graphs of equations; relations and functions; transformation of functions; combining functions and composite functions; inverse functions; exponential and logarithmic functions and equations; angles and their measure; right angle trigonometry, trigonometric functions of any angle, graphs of trigonometric ratios; inverse trigonometric functions; trigonometric identities and equations, sum, difference, double angle, half angle; applications of trigonometric functions; systems of equations; matrices and determinants; the conic sections; sequences and series.

Pre-reqs:

And MTH094

Or Test & Score: ACT Math - 22

Education

EDU230 CHILDN W SOCIOEMOTINAL EXCEPT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Definitions, causes, and characteristics of students identified with mild to moderate emotional/behavioral disabilities are studied. Social, educational, and emotional implications of learning and development are examined. Methods of assessment and interventions based on developmentally and individually appropriate practice are presented. Five observation hours required.

Pre-reqs:

EDU131

Educ/ Liberal Arts/ Math

Education

ASL222 AMERICAN SIGN LANG PRAC/SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

ASL Practicum and Seminar is a 210 hour supervised educational experience . This course will allow students to observe and practice signing in actual situations. Students will be able to apply the skills and knowledge learned in the classroom. Students will be assigned to specific community sites and will be supervised by a staff person from the community agency. This is a capstone course.

Pre-reqs:

ASL123

Business/ Entrepreneurial

Business Mgt/Entrep

MKT121 PRINCIPLES OF MARKETING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction to the important role that marketing plays in the successful operation of various enterprises that operate in both the domestic and international arenas. Emphasis is on developing marketing strategies needed to compete effectively in today's rapidly changing competitive environment. Customer buying behavior, market segmentation, quality customer service, the elements of product, distribution, pricing and promotion strategies are examined. Upon completion, students should be able to demonstrate an understanding of the above topic areas.

Pre-reqs:

BUS221

Automotive

TOY105 Toyota Engine Controls I

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This course will introduce students to the Toyota engine control system which includes all necessary computer inputs, information processing, and outputs which control engine operation. Students will learn the relationship between air, fuel, spark and compression and how the engine control system manages these. Students will be able to identify engine control inputs and outputs and describe their operation. Upon completion of this course student should have the knowledge and skills necessary to diagnose and repair concerns related to the computerized vehicle control system. Students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Upon completion of this class students will be prepared to take ASE test A-8 (Engine Performance).

Pre-reqs:

TOY104

Information Tech

Computer Science

Information Tech

Computer Science

CIS223 IT PROJECT MANAGEMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will be involved in the design, development, and management of various IT projects. Using these hands-on labs, students will develop a competency and professionalism in IT project management including the necessary business knowledge, interpersonal skills, and project management skills required to successfully manage IT projects. Topics in this course incorporate universal project management principles, and include important skills such as conflict resolution, negotiation, communicating, team building/leadership, and setting and managing expectations. Upon completion, students will have skills to explore the greater detail various project management tools, such as scheduler, spreadsheets, and databases. This course helps prepare students for the Comp TIA IT Project+ certification test.

Pre-reqs:

And ITD106

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

Or CSE233

Health and Human Services

Fire and EMS

EMS224 PARAMEDIC IV

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course is fourth in a four-course sequence. Content in the sequence follows the objectives for paramedic education according to the Ohio Administrative Code 4765 and includes the knowledge and skills required to perform patient assessment and management of medical and traumatic emergencies by performing rapid assessment, interpretation of data and advanced intervention, for patients of all ages from neonates to geriatrics. Preparation for certification testing is included. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

EMS222

Educ/ Liberal Arts/ Math

English

Educ/ Liberal Arts/ Math

English

ENG011 ACADEMIC WRITING

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course provides supplementary instruction for students who are co-enrolled in College Composition (ENG124). This course is designed to enhance student success, providing intensive individualized instruction and practice in major components of drafting, such as process writing, audience awareness, and critical thinking.

Pre-reqs:

ENG010

Or Test & Score: Compass English - 050

Engineering Tech

Engineering/Applied

CDL122 CDL-CLASS A-ADV OPER & MAINT

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course will provide the student with the instruction and requirements needed to take the Ohio CDL Class A driver's license examination. Students will acquire the advanced skills needed to respond to road emergencies, hazards and malfunctions. Non-vehicle activities include log keeping, trip planning and driver's health. Instruction will include classroom, simulator, behind the wheel range and street practice. Students must be at least 18 years of age and able to provide a valid Ohio State Driver's License with minimum two years experience, proof of U. S. Citizenship (birth certificate and Social Security card), meet minimum Department of Transportation (DOT) medical and vision standards and pass DOT drug screen. Individuals seeking the hazardous (H) endorsement are required to undergo a security threat assessment and obtain clearance from the Transportation Security Administration (TSA).

Pre-reqs:

Information Tech

Computer Science

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

Or WDD226

Engineering Tech

Engineering

Engineering Tech

Engineering

EET262 PULSE AND DIGITL INTEGRATD CIR

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course is a study of pulse terminology, number systems and codes, TTL and CMOS IC logic circuits and interfacing, Boolean Algebra and logic simplifications, integrated arithmetic circuits, counter, register, encoders, decoders, multiplexers, and demultiplexers, display devices, IC flip-flops, hardware minimization techniques are also covered in conjunction with logic circuit design. TAG approved OET002 effective Summer 2009. CTAG CTEET002 approved Spring 2012.

Pre-reqs:

Or CSE233

Education and Human Serv

Education

EDU131 Intro to Child Development

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction of the characteristics and needs of young children from prenatal stages through age eight. Typical growth and development, developmental variations, and influences on development are examined by exploring physical, cognitive, social, emotional, and language domains. Historical and contemporary theories and research that support the importance of play, environments for learning, relationships, and the role of the teacher are presented. Fifteen observation hours are required.

Pre-reqs:

Or ENG105

Health and Human Services

Respiratory Therapy/MIST

MIS124 MEDICAL INSTR STERILIZATION I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 0 Other Hours: 0

This course presents the student with an overview of the technical functions of the field of central processing/medical instrument sterilization and its application to hospital/surgical center environments. Topics include orientation to the work environment, decontamination procedures, infection control, disinfection, surgical instrumentation and standards of practice.

Pre-reqs:

And BIO125 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH124 Statistics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

Or Test & Score: M093 Transfer Prof/Placement - 2

Business/ Entrepreneurial

Automotive

AUT200 AC DELCO HVAC SYSTEM DIAGNOSTC

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course builds on what is learned in the web courses, specifically Intro to Air and HVAC Systems Operations. Intended for experienced automotive A/C service technicians, the course focuses on A/C system diagnostics, with additional emphasis placed on the electrical and control systems. Specific topics include Automatic A/C, Dual-Zone A/C and rear air systems. Hands-on practice will enable the students to apply these concepts and procedures. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121

Health and Human Services

Dietary Management

DTR230 FOODSERVICE OPERATIONS II

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This is the second course in introducing the scientific and nutritional principles involved in food preparation including ingredient function, food composition, nutritional quality, terminology, equipment usage, preparation techniques and product evaluation. Quantity food production techniques and principles are introduced. Kitchen design and equipment selection is introduced in terms of usage with products. This course includes a lab section which includes the preparation of dairy products, breakfast products, salads, grains, pasta and potatoes, sandwiches, bakeshop principles, cakes, custards, frozen desserts, and hors d'oeuvres. Students will also learn healthy cooking principles as required by the dietary guidelines, recipe and menu modification, allergies, an understanding of altered textures and buffet presentation of quantity foods.

Pre-reqs:

DTR227

And DTR231 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

IRT232 JUDICIAL RPT & CAPT INTERNSHP

Credit Hours: 2 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

The following criteria must be met for each option in the program:

Judicial Option: Internship shall include a minimum of 40 verified hours of actual writing time under the supervision of a practicing reporter using machine steno technology. Specific graduation requirements must be passed for the Judicial Option: Transcribe a minimum of three five-minute, two-voice testimony tests with a minimum of 95 percent accuracy dictated at a minimum speed of 225 wpm; transcribe a minimum of three five-minute jury charge tests with a minimum of 95 percent accuracy dictated at a minimum of 200 wpm; and transcribe a minimum of three five-minute literary tests with a minimum of 95 percent accuracy dictated at a minimum of 180 wpm; and transcribe a simulated state certification test, state qualifying exam, or RPR skills test within the allotted test transcription guidelines.

Pre-reqs:

Captioning Option: Internship shall include a minimum of 25 verified hours of writing and 15 verified hours of research and dictionary preparation under the supervision of a practicing captioner off-site, or institutional instructor for the on-campus captioning internship experience. Specific graduation requirements must be passed for the Captioning Option: Transcribe a minimum of two five-minute, two-voice, non-realtime tests with a minimum of 96 percent accuracy, dictated at a minimum of 225 wpm; transcribe a minimum of three five-minute literary tests with a minimum of 96 percent verbatim accuracy, dictated at a minimum of 180 wpm; and write three 15-minute literary broadcast material takes at 180 wpm (syllabic and/or word count) at 96 percent verbatim accuracy, following NCRA's "What is an Error?" guidelines. The instructor will grade a random five-minute selection from each 15-minute take.

Upon graduation, students should be able to pass the National Court Reporters Association's certification examinations relevant to their option.

Educ/ Liberal Arts/ Math

English

ENG011 ACADEMIC WRITING

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course provides supplementary instruction for students who are co-enrolled in College Composition (ENG124). This course is designed to enhance student success, providing intensive individualized instruction and practice in major components of drafting, such as process writing, audience awareness, and critical thinking.

Pre-reqs:

Or ENG103

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH223A ANALYTIC GEOMETRY-CAL I A

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of analytic geometry, limits, continuity, derivatives, tangent and normal lines, derivatives of trigonometric functions and related rates. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the value of a derivative at a given point. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

Or Test & Score: Compass Algebra - 084

Information Tech

Computer Security

IMT256 DIGITAL IMAGING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on both vector and raster graphics for screen based graphics. Course focuses include: graphics for video, graphics for presentations, image formatting, digital photo editing, pattern and texture creation, image optimization, and vector raster graphic integration techniques. Upon the completion of this students will understand of how to merge design technologies to create professional quality screen graphics.

Pre-reqs:

IMT122

Health and Human Services

Massage Therapy

MAS124 MASSAGE THERAPY A & P II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

General study of Anatomy and Physiology with an emphasis on massage specific information. Eleven basic systems will be studied and correlated with specific disorders. These disorders will be discussed relative to how they would affect the work of a massage therapist. Treatment of the disorders will also be discussed

Pre-reqs:

And BIO122 Can be Taken Concurrently

Health and Human Services

Massage Therapy

MAS223 MASSAGE THERAPY REVIEW

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course contains a review of human anatomy and physiology in preparation for the licensing exam for Massage Therapy as a Limited Medical Practice in the State of Ohio.

Pre-reqs:

And MAS226 Can be Taken Concurrently

MAS226 MASSAGE THERAPY V

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course, students will examine various Massage Therapy Practices in the clinical setting. Massage procedures from various disciplines will be used in the study of treatment of systemic and musculoskeletal dysfunctions. This course also provides a licensing exam review for Massage Therapy as a Limited Medical Practice in the State of Ohio.

Pre-reqs:

And MAS225

Physical Therapy

PTA123 KINESIOLOGY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The study of human anatomy emphasizing the biomechanics, motion and peripheral innervations of the musculoskeletal system as a basis for understanding normal and abnormal function and the development of exercise and gait programs. The fundamentals of posture, muscle physiology, muscle function, gait analysis and strength will be covered. Students will review muscle locations and actions, as well as locations and functions of selected ligaments, the intrinsic muscles of the hands and feet, and the innervations of the muscles of the extremities. Laboratory activities, cadaver studies and practicals are a required component of this course.

Pre-reqs:

And PTA122

Occupational Therapy

Health and Human Services

Occupational Therapy

OTA224 OT IN PHYSICAL DYSFUN

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Instruction in occupational therapy theories, assessment and screening and treatment for individuals and physical impairments and high risk medical conditions. Emphasis on use of therapeutic activities to restore, maintain and/or facilitate physical well-being and independence.

Pre-reqs:

And OTA124

Medical Assisting

MAT222 INSURANCE FOR MEDICAL ASSISTNG

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on developing a knowledge of private, government and managed care insurances. Students will learn to code from a CPT and ICD-9 codebook and complete hard copy manual claims. Students will also learn the manual pegboard system and post charges and insurance payments to the pegboard. This course covers risk management for reimbursement issues following up on unpaid claims, and appealing disallowed claims. Students will fill out hard copy CMS 1500 form. CTAG CTMAT005 & CTMAT006 approved Spring 2012.

Pre-reqs:

MAT122

Business/ Entrepreneurial

Automotive

AUT275 HONDA MANUAL TRANSMISSIONS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers Honda-specific diagnostic and repair techniques necessary to service Honda manual transmissions. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper manual transmission inspection and repair procedures. Hands-on practice will enable the students to apply these concepts to Honda vehicles.

Pre-reqs:

AUT225 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT128 DPT-MICROSOFT PUBLISHER

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts and applications of desktop publishing using Microsoft Publisher. Emphasis is placed on the creation of various types of high-quality documents that combine text and graphics. Upon completion, students should be able to design and produce professional business documents and publications.

Pre-reqs:

And IMT122

AOT238 WEB DESIGN FOR OFFICE PROF

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, design, and application for web-page publishing. Students will produce web pages by combining text, graphics, and scanned images. Upon completion, students will be able to design and produce professional web pages using advanced publishing features.

Pre-reqs:

BCA120

Engineering Tech

Engineering/Applied

ENV222 INDUST PROCES & POLUTION CNTRL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the students to environmental control systems and practical applications of their operation and maintenance. Particular attention given to piping and instrumentation diagrams, the reading of strip charts, continuous emission monitors, stack and source sampling and volumetric measurement of fluids. General troubleshooting techniques are also covered.

Pre-reqs:

CHM121

Engineering Tech

Engineering/Applied

ENV224 AIR SAMPLING-ANA & CONTR

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will review the standard methods of air sampling for gases and particulate matter. Students will learn proper monitoring equipment selection, operation and maintenance. Laboratory experience will emphasize sampling techniques, data collection and proper reporting methods. A broad overview of all aspects of air pollution will be included.

Pre-reqs:

And ENV121

Sciences

Physics

PHY101 PRINCIPLES OF PHYSICS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Survey course that assumes no familiarity with physics. Space, time, matter, motion, force, momentum, mechanical energy, heat, electricity, magnetism, light, units of measure and other concepts are studied descriptively. Basic calculation and problem-solving techniques are introduced, including a brief review of elementary algebra. Laboratory work emphasizes how to read measuring instruments, proper use of measured data in calculations, and how measured data can be used to test theories of physics. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or MTH094

Health and Human Services

Dietary Management

DMA128 DIETARY OPERATIONS DEL EXP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 2 Lab Hours: 0 Other Hours: 1

This course provides off campus experience in a community facility or food service industry, intergrated with academic instruction, precepted by a Registered Dietitian, Registered Dietetic Technician or a Certified Dietary Manager. Students apply the concepts of Human Resource Management to practical situations within the dietary management field.

Pre-reqs:

Medical Assisting

Health and Human Services

Medical Assisting

MAT234 INTRODUCTION TO PHLEBOTOMY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on phlebotomy and microcapillary puncture skills, collection/handling of specimens, quality assurance, infection control, safety and law and ethics.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Sciences

Physics

PHY125 ASTRONOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This class is a study of fundamentals of astronomy. Topics include: the solar system, planets, stars, galaxies, and the universe. This course is a comprehensive survey of astronomy designed primarily for the non-science major. Pivotal discoveries discussed in class are reinforced through lab activities that replicate topic-related studies. This course should provide the student with an understanding of the nature of the universe and insight into the scientific fields that provide the evidentiary basis for modern cosmological theories.

Pre-reqs:

And IDS102

Engineering Tech

Engineering/Applied

HVC221 HVAC FURNACE COMBUSTION PRINC

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

The National Fuel Gas Code (NFPA54) will be used as the basis for this course of study. Subjects covered will include appliance venting and vent sizing, combustion air requirements and sizing, mechanical room configuration and equipment location. Published manufacturer installation procedures will be a significant part of this course.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL224 MASTER CAM OPERATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to give the student an introduction to the different types of precision grinding. Both CNC and manual grinders will be discussed. The manual function and all aspects of preparing grinding wheels for operation, including the basics of selecting, dressing, and balancing the different types of grinding wheels as applied to the various types of metal will be discussed in great detail. The set-up of specialized grinding fixtures will be explained. All safety issues will be stressed.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT145 ADV HVAC SYSTEMS DIAG

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers an introduction to air conditioning systems and advanced HVAC systems diagnostics. The first portion of the course concentrates on R12 and R134A refrigeration systems, recovery and evacuation procedures, charging, and leak testing. Specific topics include CCOT,VDOT, and TXV systems. The second portion of the course focuses on A/C system diagnostics, with additional emphasis placed on electrical and control systems. Specific topics include automatic A/C, dual zone A/C, and rear air systems.

Pre-reqs:

Health and Human Services

Dental Hygiene

DHY127 COMMUNITY ORAL HLTH-RESEACH

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Concepts of research design and methodology in community program planning are discussed. Assessing, planning, implementing and evaluating the oral health of various populations in a community setting are presented. Learning experiences emphasize reading and reviewing scientific literature, understanding statistical reporting and the levels of public health prevention and administration.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV221 OSHA - 40 HR - HAZWOPER

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

(40 hour OSHA training) This course satisfies the requirements of OSHA Standard 1910.120. It is a health and safety training course required for all personnel who may work at a hazardous waste site. Topics to be covered include: hazardous materials chemistry, toxicology, air purifying respirators, self-contained breathing apparatus, protective clothing, site decontamination and response incidents. Safety certificate is awarded upon completion of this course.

Pre-reqs:

ARL232 ROTARY UNIT ASSEMBLY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the procedures, practices, and methods for assembling rotary unit natural gas compressors. Each component and part of the rotary unit natural gas compressor will be identified. Procedures for assembling parts and components will be demonstrated and practiced so that the student will be ready to assemble a rotary unit natural gas compressor.

Pre-reqs:

Health and Human Services

Medical Lab

MLT121 FUNDAMENTALS OF LAB TECH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to expose the student to basic skills and techniques used in the clinical laboratory. Topics to include: lab safety, lab units of measurement and calculations, preparation of solutions, care and use of lab equipment, pipetting and concepts of quality control. Phlebotomy, obtaining blood specimens by venipuncture and skin puncture is part of this course. TAG approved course- OHL008 effective Spring 2007.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

ZARC900 Understanding Art

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering

CET237 INTERPRETING CONSTRUCTION DOC

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course focuses on interpreting the construction documents for the purposes of estimating, scheduling, and field-directing a construction project. It includes reading the designers' drawings for residential, light commercial, heavy commercial, and civil engineering projects. The specifications for the projects are studied with attention to the materials and installation requirements contained therein.

Pre-reqs:

Health and Human Services

Dental Hygiene

DAS121 DENTAL ASSISTING TECH I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The student will be introduced to the fundamentals of working in a dental office as a chairside assistant. Concepts and techniques of basic equipment, four-handed dentistry, oral evacuation, instrument identification, and proper use are discussed. Oral examination, charting, medical/dental histories, sterilization, and infection control procedures are emphasized.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ETD228 SPECIAL TOPICS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Special topics in Engineering, Industrial, and Emerging Technologies Division.

Pre-reqs:

Sciences

Biology

BST240 BIOINFORMATICS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

Due to the large volume of data being generated and shared by the biotechnology community bioinformatics is an important biotechnology discipline. Utilizing computers, students will explore molecular geometric structure, sequence analysis, alignment and comparison, database mining and genome mapping.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT228 AUTO SERVICE MANAGEMENT

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The purpose of this course is to make the student aware of the Service Manager's/Service Advisor's role and what is entailed in doing the job in a professional manner. This course provides an introduction to the theory and practice of an important mid-management position in the automotive service field. Topics will include: customer-employee relations; scheduling and dispatching; legal and ethical responsibilities; consumer affairs and financial aspects; and quality assurance programs. The course will help the student gain experience in using customer contact skills, etc. by providing real-world experience in a service department through the field service component.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT289 GM AUTOTRANSMISSION/TRANAXLE

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the students the skills necessary to work with automatic transmission/transaxle systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing automatic transmission/transaxle systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in this course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

AUT248 GM POWERTRAIN PERFORMANCE

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course focuses on engine control subsystems and proper diagnosis of performance related conditions. Specific topics include: driveability, diagnosis, fuel injection systems, ignition systems, emission controls, PCM functions, and Tech 2 scan tools usage.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

ITD123 MAC CONCEPTS

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course introduces students to basic Mac computer concepts and the Mac operating system. Upon completion, students should be able to demonstrate an understanding of how the Mac computer functions, applications for which it is used and the graphical user interface.

Pre-reqs:

Sciences

Biology

Sciences

Biology

BST121 BASIC BIOTECHNOLOGY METHODS

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

Students will be exposed to and practice the various techniques used in a modern biotechnology lab. Such techniques include basic laboratory measurement and calculations(introducing micro- and nano- scale), pipetting, reagent preparation, detailed note taking, record keeping, etc. In addition, students will be taught to follow standard lab protocols to ensure good lab practices and adherence to basic governmental and safety regulations.

Pre-reqs:

Information Tech

Computer Security

CFS140 BIOMETRIC APPLICATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will present an overview of the applications of Biometrics to Homeland Security and Information Security. Topics will include the application of Biometrics to airport security, border security, critical infrastructure, and commercial and consumer markets. Students will perform hands-on implementation of Biometric technologies.

Pre-reqs:

Engineering Tech

Engineering/Applied

MST121 BLUEPRINT READING

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course provides the opportunity for students to develop the skills of reading and interpreting blueprints. Orthographic projection and concepts of visualization are discussed before the various types of blueprints are introduced. "The reading of," rather than the drawing of blueprints is emphasized throughout the course, although freehand sketching is included. Types of prints covered include sheet metal, building, piping, hydraulic and electrical.

Pre-reqs:

Engineering Tech

Engineering/Applied

AIT125 COMMERCIAL PLUMBING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to provide the student with an overview of the tools, materials, fixtures, practices, and processes used in commercial and residential plumbing. A focus on design and utilization with respect to traps, drains, vents, sizing, and overall codes will be addressed. Joining, design characteristics, and application for the various types of plumbing are also covered in detail.

Pre-reqs:

Business/ Entrepreneurial

Business Studies

BTD225 SPECIAL TOPICS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Special topics in Business Technology Division. Repeat registration permitted.

Pre-reqs:

Information Tech

Computer Security

CFS175 WHITE COLLAR CRIME

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will familiarize students with the various types of white collar crimes committed in the banking, health care and financial industry. Emphasis will be placed on recognition and investigation of white collar crime particularly those involving the use of information system resources.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV159 WASTEWATER TRTMNT-POND SYSTMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of wastewater treatment. The topics of this course include general issues regarding use of wastewater ponds as a treatment method. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Business/ Entrepreneurial

Business Studies

BTD226 SPECIAL TOPICS

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Special topics in Business Technology Division. Repeat registration permitted.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL230 FIELD SERVICE OPERATIONS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the common challenges that can arise when working in a field environment to disassemble, rebuild, or assemble compressors and compressor components. Strategies will be taught for dealing with environmental conditions, required adjustments for different compressor applications, and working effectively with customers in the field.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL140 MATERIAL HAND & COMP PREP

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the procedures, practices, and methods of lifting and maneuvering large compressor parts with appropriate crane lifting techniques. Students will lift guides, frames, cylinders and other large parts of varying sizes to learn appropriate techniques for lifting and positioning equipment for part cleaning and assembly tasks.

Pre-reqs:

Information Tech

Computer Security

IMT122 GRAPHIC ARTS DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Topics include effective communication through design from thought to finished process. Upon completion students will be able to effectively use Adobe Photoshop to create computer graphics.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV143 BASIC WATER TRMT-FLUORIDATION

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the Internet, students will explore the rudiments of water treatment. The topics of this course include general issues operators face when dealing with the fluoridation processes. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Engineering Tech

Engineering/Applied

MST221 MECHANICAL DRIVE COMPON

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The study of bearings, shafts, couplings, cams, brakes, gear drives, belt drives, chain drives and clutches. Included are component application and maintenance.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT213 ACDELCO ENGINE PERF CMPT CTRLS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Building upon the technicians knowledge obtained in the related ACDelco Engine Performance web courses, this all-makes instructor led course led course utilizes class discussion and hands on lab experience to further explore and improve the participant's electronic engine performance control system and ignition systems diagnostic skills. Course topics include: input and output device operation, testing, and diagnosis; an overview of module processing operation, testing, and diagnosis of ignition systems and subsystems, including COP (Coil on Plug). Exercises are assigned by the instructor and are comprised of: desk, bench, case study, on-vehicle, and proper tool usage activities.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV126 HAZWOPER-MODERATE RISK

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An internet-based course that provides 24 hours of interactive training online for those needing Moderate Risk certification (29 CFR Part 1910.120). The course consists of an online text, interactive exercises, web links, self-grading quizzes and final exam. This is a 100% web-based course.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL124 BASIC METROLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides an in-depth study of measuring principles, instruments, and techniques. The measuring instruments most commonly used in industry, including coordinate measuring machines, are covered. Emphasis is placed on proper use of equipment in terms of prevention and minimization of reading errors as related to Geometric Dimensioning and Tolerances.

Pre-reqs:

Health and Human Services

Nursing

HTD202 HLTH INDEP STUDY

Credit Hours: 2 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Health Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Health Technology will determine course content, meeting schedules and credit hours.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV149 WATR DISTBTN SYS-STORAGE SYS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The specific topic of this course is that of water storage facilities. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT172 HONDA ENGINE MECHANICAL

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers Honda-specific diagnostic and repair techniques necessary to service Honda engine mechanical systems. Prior to hands- on practice, the instructor will demonstrate equipment usage, Honda service materials, proper engine mechanical inspection and repair procedures. Hands-on practice will enable the student to apply these concepts to Honda vehicles. Special emphasis is placed on the safety and cleanliness aspects related to automotive engine mechanical service. Information covered in this course should assist the student in reaching a level of understanding necessary to attempt ASE certification in this area.

Pre-reqs:

Health and Human Services

Nursing

NUR201 TRANSITION FOR LPNS

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 3 Lab Hours: 6 Other Hours: 0

This course is designed for the licensed practical nurse who is admitted to the Nursing Program with advanced standing. Content includes introduction to ADN philosophy, refinement of the nursing process and nursing assessment, role transition and select trends in nursing. Select nursing skills will be evaluated in the learning laboratory as a means of validating safe performance of these skills.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT243 GM AIR BAG SYSTEMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course focuses on front, side, and rear air bag systems. Students will gain skills and information to identify the different air bag systems and components, disarm and safely handle system components. Diagnostic tests will be performed, utilizing the Tech 2 scan tool, and digital multimeter. The course also includes content on the safe disposal and shipping of inflator modules.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ARL146 COMPRESSOR DOC INTEGRATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover documentation, information access, and reporting required to successfully engage in the compressor assembly process. The build book will be a primary focus of the course where students will understand how the book is generated and used to help guide successful assembly of compressors. Students will also use MRP systems to locate and report data to fuel the assembly process. ISO procedures will also be identified and reviewed.

Pre-reqs:

HVC124 MOBILE CAB CLIMATE CNTL SYS/AP

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will provide the student with a comprehensive understanding of the safe installation, start-up, service, and field repair of the MacBone Industries Ltd. Mobile Heating/AC Unit. The refrigeration cycle and leak detection/repair will be covered: including brazing, evacuation, and charging. At course conclusion of this course the mobile (Automotive) EPA refrigerant handling testing & certification will be conducted.

Pre-reqs:

Engineering

DET121 ENGINEERING DRAWING

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This is a beginning drafting course that includes use of instruments, geometric constructions, technical lettering, orthographic projection, auxiliary views, sectional views, dimensioning and conventional practice.

Pre-reqs:

Engineering/Applied

Engineering Tech

Engineering/Applied

AIT131 ELECTRICAL APPLICATIONS SFTY

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course provides the knowledge and skills required to understand, safely service and troubleshoot basic electrical circuits. Basic electricity and DC circuits, as well as proper meter use, are explained. The relationship and understanding of current, voltage, and power schematics, troubleshooting basic electricity, digital concepts, PLC concepts and electronics are covered.

Pre-reqs:

ENV156 WASTEWATER TRTMT-DISINF CHLORN

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of wasterwater treatment. The topics of this course include general issues operators face when disinfecting wastewater. Along with reading assignments from the text, the course is enhanced with audio, up-to- date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Educ/ Liberal Arts/ Math

English

ENG222 HEALTH INFORMATION WRITING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Health Information Management Technology students develop skills in various kinds of writing to meet the needs of the global workplace, such as letters, memos, emails, instructions, reports, abstracts, minutes, agendas, summaries and proposals, in addition to developing a resume with a letter of application. Students will learn research techniques based on medical databases related to health information as well as other electronic sources in this technology.

Pre-reqs:

And HIT223 Can be Taken Concurrently

Information Tech

Computer Security

Information Tech

Computer Security

IMT122B GRAPHIC ARTS DESIGN B

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

Students completing the course will obtain functional and foundational knowledge of Adobe Photoshop CS3 and will use that software in the design materials for the course. Knowledge of the concepts and the software taught in this course are necessary for students interested in pursuing careers in Graphic Design, 3-D Design, Desktop Publishing and Animation.

Pre-reqs:

IMT122A

Educ/ Liberal Arts/ Math

Mathematics

MTH223B ANALYTIC GEOMETRY AND CAL I B

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of functions, Newton's method, Rolle's theorem, mean value theorem, extrem of faunctions, antiderivatives, definite integrals, indefinite integrals, areas and volumes. Key ideas and concepts will be presented from a variety of perspectives with a broad range of examples and applications. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the Trapezoidal Rule and Simpson's Rule for integration. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

MTH223A

Business/ Entrepreneurial

Business Mgt/Entrep

MGT227 OPERATIONS MANAGEMENT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course examines the concepts for designing, planning and improving manufacturing and service organizations. It covers many of the computational techniques applied to problems of efficiently converting inputs into outputs. The areas covered include: project management, forecasting, capacity planning, work measurement, quality and statistical quality control, supply chain, plant location, layout scheduling, materials management and maintenance. Upon completion , students should be able to demonstrate an understanding of operations management principles.

Pre-reqs:

And MTH222

Health and Human Services

Medical Assisting

Health and Human Services

Medical Assisting

MAT122 MEDICAL ASSISTING II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

Medical Assisting II focuses on performing and assisting with advanced clinical skills: venipuncture/specimen preparation, electrocardiography, suture insertion, wound irrigation and wound care, gynecological examination, specimen preparation, and instructions for self breast examination, positioning and draping of patients for specific examinations, urinary bladder catheterization, medical records and theory of x-rays and diagnostic radiology testing. Patient communication skills and patient education are employed through role-playing. Documentation of clinical procedures is stressed throughout the course of study. Pathophysiology is presented as related to procedures. CTAG CTMAT011 approved Spring 2012.

Pre-reqs:

MAT121

MAT230 ADV PHLEBOTOMY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Advanced Phlebotomy is designed for Stark State College of Technology students who have had venipuncture or Certified Medical Assistants with at least one year of drawing experience. It focuses on hospital or clinical phlebotomy and expands to specimen collection, handling and transporting as well as safety and infection control practices that protect a phlebotomist while in class or at a clinical facility. There is emphasis on collecting specimens from hard-to-draw patients and tests that are often unique to a hospital. This course is designed to complete educational requirements for candidates to sit for the National (NCA) Clinical Laboratory Phlebotomy Certification examination. Forty hours of clinical externship in a hospital or clinical facility are required for completion of advanced phlebotomy.

Pre-reqs:

MAT122

Business/ Entrepreneurial

Business Mgt/Entrep

MKT226 SUPPLY CHAIN MANAGEMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An introduction to the processes and activities associated with cost-effective industrial procurement and the internal management of all materials and equipment needed by a manufacturer to produce products or provide services. Upon completion, students should be able to demonstrate an understanding of the processes and activities associated with cost effective purchasing.

Pre-reqs:

MKT121

Business/ Entrepreneurial

Business Mgt/Entrep

MKT233 MARKET RESEARCH

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides knowledge and application to the Market Research method and practices to be successful in today's business arena. It includes the study of the role of marketing research, research design, data collection skills, communication research results and the management of marketing research. Upon completion, students should be able to demonstrate an understanding and practical application of field of marketing research.

Pre-reqs:

MKT121

Information Tech

Computer Security

ECA130 SOFTWARE VULNERABILITIES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Enumeration, exploits, keygens and other application vulnerabilities are presented. Security holes and exploitations in computer, interpreted and web based applications are addressed in a hands-on environment.

Pre-reqs:

And EET131

IMT243 ADVANCED COMPOSITING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the design and integration of motion graphics with video. Studio projects will reinforce topics such as integration of 3D graphics with video, advanced animation techniques, filters and footage repair. Techniques learned will apply equally to game design and movie special effects. Students will gain these skills through a series of hands-on project utilizing Adobe After Effects and Autodesk 3DsMax.

Pre-reqs:

IMT237

Information Tech

Computer Security

IMT253 GRAPHIC FOR ILLUSTRATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will learn how to develop basic illustrations and line art using Adobe Illustrator. Labs focus on drawing and creating logos, print and web graphics, industrial devices and medical illustrations.

Pre-reqs:

IMT122

Engineering Tech

Engineering/Applied

MST226 TUNGSTEN INERT GAS WELD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Study of standard and programmable TIG welding equipment: welding of various metals such as aluminum, stainless steel, copper, and mild steel with considerations given to variables such as shielding gas types and sizes, and types of tungsten electrodes.

Pre-reqs:

MST128

Health and Human Services

Occupational Therapy

OTA226 OT ASST SEMINAR

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Examination and discussion of the professional roles and responsibilities of the occupational therapy assistant. Includes exploration of traditional and non-traditional roles, certification, conflict resolution, collaboration of OTR and COTA, ethics and legal aspects of treatment.

Pre-reqs:

OTA224

Engineering Tech

Engineering

Engineering Tech

Engineering

EET125 CIRCUITS MANUFAC TECHNIQUES

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

Safety in the shop and stages of project development are emphasized. Electrical and mechanical shop practice including use of hand tools, through hole and surface mount, soldering techniques, solderless terminations, wire preparations, wiring techniques and parts ordering.

Pre-reqs:

EET120

EET227 PLCS AND INDUSTRIAL CONTROLS I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A presentation of techniques, application and development analysis of relay control circuits with implementation of electromechanical devices, programmable controllers and variable frequency drives. Circuits, devices and techniques studied include control of motor starting, motor speed control, machine cycle control, control components, pilot devices, maintenance and troubleshooting circuits. CTAG approved Spring 2012 TMSBS.

Pre-reqs:

Or EST130

EET228 PLCS AND INDUSTRL CONTROLS II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Application and analysis of microprocessor-based computer systems and programmable logic controllers to industrial control systems. Introduction to closed systems control (PID control) and robot control. Introduction and application of Programmable Logic Control Network Interfaces. Human-machine interfaces topics are also addressed.

Pre-reqs:

EET227

Engineering Tech

Engineering

EET248 WORKSTATION INTERFACING

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

A study of digital circuitry and current operating systems for port input and output management to microcontroller and personal computer bus architecture. The course includes digital and analog interfacing using serial, parallel ports, and various current interface ports. TAG approved course- OET004 effective Spring 2008.

Pre-reqs:

ECA128

Engineering/Applied

EST129 SWITCHGEAR, TRANS, CONTROLS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 2 Lab Hours: 1 Other Hours: 0

The course covers low and high voltage circuit breakers and switchgear primarily from 4KV to 15KV. It shows how switchgear is basically constructed, how circuit breakers work, and general maintenance of such equipment. The basic theory of transformers and connection schemes of common types of transformers including dry and wet type distribution transformers, power transformers, and instrument transformers is explained. Control ladder and wiring diagrams with an introduction to input and output control devices, are presented and implemented in lab.

Pre-reqs:

EET120

EST133 DIGITAL LOGIC FUNDAMENTALS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 4 Lab Hours: 1 Other Hours: 0

This course covers the fundamentals of digital logic circuits. Topics include number systems, logic gates, Boolean algebra, logic simplication, karnaugh maps, adders, multipliers, multiplexers and decoders. Elementary digital circuits including flip-flops, counters, shift registers, memory devices, programmable logic devices and integrated circuits are also covered.

Pre-reqs:

EST132

Engineering Tech

Engineering/Applied

EST221 ELECTRONIC TBLSHOOTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 1 Other Hours: 0

Course covers:principles of troubleshooting with electronic/electrical testing instruments, troubleshooting electric motors and generators, industrial controls, residential and industrial wiring, power supply repair, signal tracing, "in-circuit" semi-conductor testing and pulse circuit troubleshooting.

Pre-reqs:

EET123

Information Tech

Computer Security

IMT125 3D GRAPHICS MODELING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Topics include 3d modeling, texturing, lighting, and rendering. Upon completion, the student will be able to effectively use the 3dsMax interface to create and render 3d objects and scenes.

Pre-reqs:

IMT122

Business/ Entrepreneurial

Accounting/Finance

ACC222 INTERMEDIATE ACCT II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This is the completion of a two-course sequence in the study of accounting theory. In this semester, students become more involved in the discussion of the intention of management in engaging in certain types of transactions and the impact of alternate methods of reporting in the financial statements. The subject areas studied include long-term debt, intercorporate investments, corporate equity matters, earnings per share, revenue recognition, pensions, leases, cash flow statements, and accounting for income taxes. Some review items include certain analytical ratios and other concepts underlying the preparation of meaningful and complete financial statements. Upon completion of the course, students should be able to demonstrate competence in recognition of important disclosures in financial statements, discuss and evaluate alternative accounting methods and apply generally accepted accounting principles to the preparation of financial statements, including the statement of cash flows.

Pre-reqs:

ACC221

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

AIT132 STATIONARY STEAMPLANT ENGINERG

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course covers the principles and applications of Ohio code law for boiler operation, abatement equipment, boiler design and application mathematics, duplex pump and steam engine. This course counts for 1,000 hours of the state-required experience hours needed to apply to take the third-class stationary engineer's state license exam.

Pre-reqs:

AIT122

Engineering

CET224 STRUCTURAL DESIGN II

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Analysis and design of wood members (beams, columns) will be covered in this class. Advanced topics in steel connections and concrete reinforcement of beams, slabs, columns, footings and retailing walls will also be studied. Current computer software for structural analysis will be used.

Pre-reqs:

CET223

Sciences

Chemistry

CHM121 GEN/ORG AND BIOL CHEMISTRY I

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Principles of general and inorganic chemistry are presented in lecture. Topics include atomic structure, chemical bonding and compounds, energy changes, gas laws, solutions, and acids and bases. The laboratory experiences include basic scientific measurements, physical property measurements, inorganic physical and chemical change observations and laboratory reporting.Ohio Transfer Module Approved Effective Autumn 2008.

Pre-reqs:

CHM101

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY126 PATHOLOGY

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Diseases of development and growth including neoplasms, diseases of microbial origin, injury and repair, disturbances of metabolism and diseases of specific systems is presented.

Pre-reqs:

DHY122

Sciences

Chemistry

CHM141 GENERAL CHEMISTRY I

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

A broad overview of chemical principles and reactivity. Topics include atomic structure, chemical bonding and molecular structure, inorganic compounds, organic compounds, chemical periodicity, stoichiometry and nuclear chemistry. This course is Ohio TAG approved. OSC023 sequence & OSC008 Effective Summer 2008. OTM approved for TMS Spring 2011.

Pre-reqs:

Or Test & Score: HS Chemistry - 2

Information Tech

Computer Security

IMT255 ADVANCED ILLUSTRATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will expand on the skill learned in IMT253 and will focus on logo design and illustration design using Adobe Illustrator. Demonstrations will include hands-on projects produced by students to enhance their their understanding of vector artwork. Upon completion of this course, students will have an increased knowledge and understanding of Adobe Illustrator, logo design and illustration design.

Pre-reqs:

IMT253

Information Tech

Computer Security

IMT263 PHOTOGRAPHIC LIGHTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course gives students an in-depth understanding of light in photography and how to use different lighting equipment and techniques to achieve desired effects in a final image. Topics of instruction include: correct exposure, lighting ratios, basic portraiture lighting, and studies in composition of commercial photographs.

Pre-reqs:

IMT132

Sciences

Chemistry

CHM121B GEN, ORG, AND BIO CHEMISTRY IB

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

A broad overview of inorganic chemical principles. Topics include energy changes, gas laws, soluability, solutions and acids and bases. TMNS approved Spring 2012.

Pre-reqs:

CHM121A

Biology

CST221 COMPUTATIONAL BIOLOGY

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is designed to introduce the student to the field of computational biology through the use of basic modeling and simulation modules utilizing existing computer programs. The course will incorporate mathematical methods and computer science skills to model simple biological life processes and simulate outcomes. The use of statistical analysis techniques will aid in the interpretation of data. Integration of lecture and computer lab time will allow for exploration of existing databases and model manipulation.

Pre-reqs:

CST121

Health and Human Services

Nursing

Health and Human Services

Nursing

NUR224 NURSING SEMINAR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course examines issues related to the role transition from student to entry-level associate degree nurse. Emphasis is placed on student's involvement in exploring issues relevant to practice as a staff nurse.

Pre-reqs:

And SOC121

Engineering Tech

Engineering

EET123 ELECTRONC DEVICES AND CIRCUITS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Theory, characteristics and applications of solid-state devices. Devices covered include: diodes, bipolar junction transistors, field effect transistors, operational amplifiers, analog and digital voltage regulators.

Pre-reqs:

EET120

Educ/ Liberal Arts/ Math

English

ENG235 INTRO TO SHAKESPEARE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is a study of representative plays and poetry of William Shakespeare. Students will read, discuss, and write about the works in their historical and cultural contexts. Emphasis will be placed on the critical reading of the works and techniques used to analyze them.

Pre-reqs:

ENG124

Educ/ Liberal Arts/ Math

English

ENG236 AMERICAN LIT:COLONIAL to 1865

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers American Literature from the time of Native Americans to the Civil War. Students will read, discuss, and write about works by American authors in their historical and cultural contexts. Emphasis will be placed on critical reading of the works and techniques used to analyze them. TAG OAH053 approved Spring 2012. TMAH approved Spring 2012.

Pre-reqs:

ENG124

Information Tech

Administrative Srv Off Applion

IRT233 TRANS & EDITING FOR SCOPISTS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will learn transcription, editing, and research skills specific to the scopist/reporting profession. Instruction utilizing online, computer-aided transcription technology, with emphasis on note reading, translating and editing skills, grammar and proofreading skills, research techniques, and globalizing steno entries. Upon completion, student should be able to read, translate, edit, globalize steno outlines, and print for transcription production.

Pre-reqs:

And IRT231

Engineering Tech

Engineering/Applied

AET123 SUSTAINABLE/ALT ENERGY SYS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers in detail complete sustainable alternative energy systems including service, inspections, and predictive maintenance. This course will address the subsystems and balance of plant systems for the sustainable alterative energy systems. Topics include: safety procedures, interconnect systems, series versus parallel electrical conduction, power conditioning of DC and AC voltages and currents, heat transfer, and interfacing with the power grid.

Pre-reqs:

AET122

Engineering Tech

Engineering/Applied

MST137 6G WLDG CERT EXAM PREP

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

This course will cover: the fit-up and welding of pipe in 5G and 6G positions (uphill) using the SMAW process, the welding of root and hot pass methods done with E-6010 electrodes, and the fill and cap pass using E-7018 electrodes. Students will perform destructive tests per American Society of Mechanical Engineers (ASME) Section IX Boiler and Pressure Vessel Code.

Pre-reqs:

MST127

Business/ Entrepreneurial

Business Mgt/Entrep

MGT234 BUSINESS PLAN DEVELOPMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to provide future entrepreneurs with the foundation skills necessary to develop a business plan by focusing on critical business plan elements, including budgeting and pro-forma financial statements, management, operating and marketing strategies. The class will also provide an overview of corporate forms, financing, and common legal and tax issues. Students will discuss innovation and idea creation strategies. The emphasis of the course will be in the development of a functional business plan for either an independent new venture or for a new corporate venture while gaining a thorough knowledge of the legal requirements for establishing a business along with an understanding of the financial obligations required to open a business. Upon successful completion of this course, students should be able to develop a workable business plan.

Pre-reqs:

ENT221

Sciences

Chemistry

CHM244 BIOCHEMISTRY II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

: As a continuation of Biochemistry I, CHM 243, this course will cover the biochemical mechanisms involved in the chemistry of amino acids metabolism, biosignaling, photosynthesis and CO2 fixation, genetics, structure of nucleic acids, replication, transcription and translation processes, gene expression, recombinant DNA technologies and mutations.

Pre-reqs:

CHM243

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM230 ARGUMENTATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to rhetorical theory particularly as it relates to the theory and practice of argumentation. Students will have the opportunity to practice argumentation in academic debating and persuasive speaking. Students will also study the theoretical foundation of argumentation and its application in various contexts.

Pre-reqs:

COM121

Sciences

Physics

PHY221 GEN PHYSICS I W CALC

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

Study of mechanics, heat and thermodynamics, oscillations and sound. Problem solving in orientation, emphasizing the application and derivation of formulas using calculus for physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TAG approved Fall 2012 OSC016.

Pre-reqs:

And MTH224 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM127 HEALTH COMMUNICATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to provide an overview of Health Communication through an examination of theoretical frameworks, communication strategies, and technologies that promote the health of individuals, communities, and populations. These various aspects of Health Communication will be analyzed through the lens of various aspects of health care (patient perspective, caregiver perspective, health images in media, etc.) Students will examine these aspects through various subdisciplines of communication (interpersonal, groups/organizations, public relations, media, etc.).

Pre-reqs:

Or Test & Score: Compass Reading - 080

IDS102

Health and Human Services

Health Information

Health and Human Services

Health Information

HIT123 HLTHCRE LEGAL AND ETHICAL ISS

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Legal aspects of health information management practice; overview of judicial system and processes; importance of the health record as a confidential and legal document; practice in the release of information function; record retention and destruction of records are studied; current legal issues, compliance, privacy and security; professional and practice related ethical issues and laws are discussed. TAG approved Spring 2012 OHL021.

Pre-reqs:

HIT230

Medical Lab

MLT222 CLINICAL CHEMISTRY

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3.5 Lab Hours: 3.5 Other Hours: 0

The course is designed to introduce the student to the principles of laboratory instrumentation, clinical chemistry procedures and quality control concepts. The course covers renal and liver function; carbohydrate, lipid and protein metabolism; hormones; electrolytes and mineral balance; blood gases; and clinical enzymes and therapeutic drug monitoring. The class uses lecture, case studies and laboratory procedures.

Pre-reqs:

BIO122

Information Tech

Computer Science

WDD224 ACTIVE SERVER PAGE DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on server side programming with ASP.Net. Students learn to connect to a database, add, update, and delete from the database, create user controls, master pages, XML driven site navigation and login pages. ASP.Net web controls are emphasized. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

And ECA127

Information Tech

Computer Science

WDD223 CONTENT MGT SYS DEV DES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course teaches students to set up, design, and customize various open-source content management systems. In addition, students will be instructed on the various ways to add shopping cart functionality to those systems. Upon completion, students will be able to make customizations to various open-source content management systems.

Pre-reqs:

ECA253

WDD222 ADVD CASCADING STYLE SHEETS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on developing web pages with the latest design and development techniques such as web pages created entirely using a CSS layout. Usability is emphasized as well as web site documentation. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA228

WDD226 WEB DEV WITH PHP AND MYSQL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn to develop server side scripts with PHP including developing various web applications and connecting to a MySQL database. Additional topics include the development and design of the MySQL database. Upon completion, students will be capable of utilizing PHP to develop web applications and connect to a MySQL database. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or CSE122

Information Tech

Computer Science

WDD229 ADVANCED WEB DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on creating and coding advanced web designs with HTML and CSS. Advanced graphic techniques are introduced. Hands-on projects take the student from an initial concept to a graphic mockup and finally to a complete web page.

Pre-reqs:

ECA138

GIS233 ADV TOOLS IN GEOSPAT TECH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course prepares students to apply processes in geospatial technologies, including spatial analysis, surface analysis and routing analysis. Students are expected to be able to apply appropriate database management and file structure skills in building a geodatabase. By learning the application of GIS data structures and topology, students will be expected to perform geospatial analysis from data collection to data analysis.

Pre-reqs:

And GIS232

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM227 INTERCULTURAL COMMUNICATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction to the study of culture and co-cultures and how they are influenced by and effect communication. This course provides an overview of study in communication between and within cultures and co-cultures. In an increasingly global society, being able to communicate effectively with people from different cultures and diverse backgrounds is imperative. Toward that end, this course emphasizes a practical application of intercultural communication concepts and principles, encouraging students to become more competent communicators in a culturally diverse world.

Pre-reqs:

COM122

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT122 AUTOMOTIVE SYS AND ENG TEC

Credit Hours: 4 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This course is designed to introduce the student to the technology and terminology of the automotive industry. The various components and systems of the automobile will be surveyed, and the basic operational theory of each will be explained. Special emphasis is placed on understanding the theory, nomenclature, and construction of the automobile engine. Subjects such as energy transformation, combustion, fuel metering, basic fuel injection, and basic emission controls will be presented. Classroom learning will be reinforced by laboratory activities.

Pre-reqs:

AUT121 Can be Taken Concurrently

AUT223 ADV AUTO ELECTRONICS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course provides the student with the knowledge and skills required to diagnose, service, and repair body electrical systems. Students will learn how to diagnose problems and will develop skills utilizing proper diagnosis procedures. Skills developed in this course, electric and electronics systems A6, will correlate to the ASE task list. This course is an in-depth lab study of electrical/electronics, electronic information retrieval, circuit protection devices, wiring, circuit operation and diagnosis procedures of controls including, but not limited to, single and multiple contact switches, relays, transistors and computers, will promote equipment usage and personal safety for the more sensitive and complex components presented in AUT 227.

Pre-reqs:

AUT125

Information Tech

Administrative Srv Off Applion

AOT227 ADMIN PROCEDURES AND SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Emphasis will be placed on an administrative office setting. Areas covered include keyboarding and composing of various office correspondences, processing mail, dealing with visitors, maintaining an office calendar, and making travel arrangements. Office problems, practices, and procedures are also emphasized

Pre-reqs:

And AOT130

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

FIN227 MONEY AND BANKING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will address the economic concepts associated with money, financial institutions and monetary policy. Topics covered include: financial markets and interest rates; the structure and management of financial institutions; the structure of central banks and the Federal Reserve System; and, determininants of the money supply and the tools of monetary policy. Upon successful completion of this course, students should be able to apply and demonstrate an understanding of the above topics relative to today's economy.

Pre-reqs:

Or BUS123

FIN221 INVESTMENT AND SECURITIES

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is designed to provide the student with a clear understanding of the investment environment including the basics of investing ranging from descriptive material to the theory of portfolio construction and efficient markets. It includes the appraisal of the vast options for investors, the concept of risk, information sources and provides insight into the topic of security analysis. An investment simulation in a portfolio of securities allows the student to experience "hands-on" investing as they progress throughout this course. Upon completion, the student should be able to research stocks, mutual funds and bonds, make trades and review and analyze their account activities.

Pre-reqs:

ACC132

Engineering Tech

Engineering

CET235 CONSTRUCT MGT/JOB COST AND SAF

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the progression of a building project from its inception to completion along with the administration of it in the office and in the field. Contract law and the legal implications of documents will be discussed. The student will also be familiarized with specifications, shop drawings and computerized project control software.

Pre-reqs:

CET121

Health and Human Services

Dietary Management

Health and Human Services

Dietary Management

NTR121 BASIC MEDICAL NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on the essentials of nutrition as required for health. The composition of foods, as well as the functions, sources and interactions of essential nutrients within the role of the human body's metabolic system are discussed. Assessment of nutritional health risks, along with health promotion and disease prevention is discussed. The influence of age, growth and normal development of the life stages are discussed in terms of the nutritional requirements. Methods of meeting dietary needs and sources of reliable nutritional information are addressed along with current nutritional issues and research.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Information Tech

Administrative Srv Off Applion

AOT224 LEGAL OFFICE PROCEDURES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an introduction to the unique characteristics of law office organization and management with an emphasis on computer applications in law. A general introduction to nonlitigation responsibilities and fundamentals of grammar, style and letter writing are covered. Upon completion, students should be able to demonstrate an understanding of concepts and procedures in a law office.

Pre-reqs:

Or OAD130

Health and Human Services

Medical Lab

MLT223 CLINICAL MICROBIOLOGY

Credit Hours: 7 Contact Hours: 9 Lecture Hours: 4 Lab Hours: 5 Other Hours: 0

The student will study the morphology and identification of microorganisms commonly found in humans, their relationship to disease states and their susceptibility to antibiotics. Topics include: basic structures and functions of bacteria; culture, growth and development requirements; classification of microbes; infectious disease; control of disease; laboratory safety; unknowns for identification from ATCC (American Type Culture Collection) seeded cultures; videotapes and kodachromes. Other topics include mycology, parasitology and virology.

Pre-reqs:

BIO221

Information Tech

Computer Security

Information Tech

Computer Security

CFS176 ONLINE INVESTIGATION RESOURCES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide the student with knowledge, techniques and tools to gather information from various online resources that are available in the public domain that can assist in the process of conducting various types of investigations.

Pre-reqs:

Or ECA137

Health and Human Services

Medical Lab

MLT226 MLT DIRECTED PRACTICE

Credit Hours: 6 Contact Hours: 30 Lecture Hours: 0 Lab Hours: 30 Other Hours: 0

Students are assigned to an affiliated clinical laboratory and have the opportunity to perform clinical laboratory testing using modern equipment, under the supervision of a practicing laboratorian. Students rotate through the main laboratory departments which include: hematology and hemostasis, blood bank, microbiology, chemistry. Experiences include operating and maintaining sophisticated laboratory analyzers, evaluation of test results, refining phlebotomy skills, interaction with the clinical laboratory staff, with other health care professionals, and with the patient.

Pre-reqs:

And MLT227 Can be Taken Concurrently

Information Tech

Computer Security

CFS281 ADV DIGITAL MEDIA FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The student will learn advanced techniques to gather date from digital devices focusing on data maintained in system memory and recovery of this data using live acquisition tools and techniques.

Pre-reqs:

ECA258

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

PLS122 CIVIL LITIGATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the rules of civil procedure, with emphasis on the Ohio Rules of Civil Procedure. Topics include pleadings, motion practice, discovery, trial preparation, and alternative dispute resolution, focusing on the role of the paralegal throughout the litigation process.

Pre-reqs:

PLS121

Engineering Tech

Engineering

CET222 CONCRETE AND ASPHALT TEST

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Major emphasis will be placed on the testing procedures used by engineers in determining material acceptance. Concrete and asphalt design methods will be covered, along with the conducting of many tests and the design of pavement. TAG approved course- OET018 effective Spring 2008.

Pre-reqs:

And MTH125

CET226 ESTIMATING

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course develops the methods and procedures for preparing construction estimates, both manually and electronically. Topics include excavation, masonry, concrete, steel and carpentry. Emphasis is placed on take-off procedures and pricing, consideration of labor and equipment costs, and overhead and profit. Computer programs will be utilized to establish a construction schedule. The student will do a complete estimate of a building project and prepare a competitive bid for the job.

Pre-reqs:

Or CET237

Or DET125

Engineering Tech

Engineering

EET263 INDUSTRIAL SENSORS/ADV APPLCS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

EET263 will cover common sensors used throughout industry. Students will see how basic concepts discussed in circuit analysis courses are applied to sensor design and applications. Course will provide hands on labs in wiring and testing of various types of sensors used in industry.

Pre-reqs:

EET120

Or EST130

CET232 LAND PLANNING AND DESIGN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course covers the study of site capabilities and potentials as they relate to land planning and subdivision design. Students will complete preliminary layouts for projects such as industrial parks, housing allotments, planned unit developments and commercial home sites in accordance with zoning and subdivision regulations.

Pre-reqs:

Or DET125

Educ/ Liberal Arts/ Math

English

ENG232 SCRIPTWRITING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will focus on the creation of scripts for corporate marketing, training and educational videos. Narrative structure and dramatic storytelling will be employed in the creation of the scripts.

Pre-reqs:

ENG227

Information Tech

Computer Science

Information Tech

Computer Science

CSE222 IOS DEVELOPMENT I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers how to build mobile application for the Apple iOS. The history and architecture of iOS will be analyzed. Upon completion of the course, students will be able to create simple iOS applications and also have an understanding of the various tools available with the iOS SDK.

Pre-reqs:

CSE121

Administrative Srv Off Applion

AOT239 LEGAL TRANSCRIPTION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to prepare students to perform legal transcription in a law office or other legal settings. Classroom instruction will be provided in the different areas of law, the judicial system and legal terminology. Provide students with the knowledge, terminology and background needed to prepare legal documents. Upon completion, students should be able to proficiently transcribe and format a variety of legal documents.

Pre-reqs:

AOT130

Educ/ Liberal Arts/ Math

Mathematics

MTH223A ANALYTIC GEOMETRY-CAL I A

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of analytic geometry, limits, continuity, derivatives, tangent and normal lines, derivatives of trigonometric functions and related rates. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the value of a derivative at a given point. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

Or MTH125

And MTH130

Educ/ Liberal Arts/ Math

Mathematics

MTH223 ANALYTIC GEOMETRY-CAL I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of analytic geometry, limits, continuity, derivatives, tangent and normal lines, derivatives of trigonometric functions, related rates, Newton's method, Rolle's theorem, mean value theorem, extrema of functions, antiderivatives, definite integrals, indefinite integrals, areas and volumes. Key ideas and concepts will be presented from a variety of perspectives with a broad range of examples and applications. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the Trapezoidal Rule and Simpson's Rule for integration. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

And MTH130

MTH224 ANAL GEOM & CALC II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This is the second course in the study of calculus. It includes the derivatives of inverse and exponential functions and a sustained study of integration techniques including integration by parts, trigonometric integrals, and partial fraction decomposition and applications of these. The importance of Riemann sums is demonstrated with the use of numerical methods such as the Trapezoidal Rule and Simpson's Rule. Students will see limits leading to indeterminate forms and the incorporation of L'Hopital's Rule and they will evaluate improper integrals and integrals on which the integrand becomes infinite. The existence of limits of sequences will be determined and tests for convergence of series will be introduced. Analysis of curves given parametrically and in polar form and areas of regions defined by such curves will also be investigated. Ohio Transfer Module Approved Spring 2012 TMM006.

Pre-reqs:

MTH223

Information Tech

Administrative Srv Off Applion

AOT227 ADMIN PROCEDURES AND SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Emphasis will be placed on an administrative office setting. Areas covered include keyboarding and composing of various office correspondences, processing mail, dealing with visitors, maintaining an office calendar, and making travel arrangements. Office problems, practices, and procedures are also emphasized

Pre-reqs:

AOT121

Engineering Tech

Engineering

Engineering Tech

Engineering

MET124 STATICS/STR OF MATERIALS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The study of major force systems under conditions of equilibrium. Various methods are used to analyze the effects loads have on structural members and machine components. Topics include force systems, friction, stress and strain, moment and shear diagrams, centroids, moments of intertia, and beam deflection analysis. Emphasis is placed on learning the fundamentals and applying them to solving problems. TAG approved course- OET007 effective Spring 2008.

Pre-reqs:

PHY121 Can be Taken Concurrently

Information Tech

Computer Security

NET220 UNIX/LINUX OPERATING ENVIRONMT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers working at the Unix/Linux shell command line, customizing the shell environment, understanding basic filesystem structure and permissions, file management tools, basic shell scripting techniques, vi text editor, data processing tools, Xserver, Xwindows, remote machine access using SSH & FTP, compiling C programs under Unix, and formation of make files and the make command.

Pre-reqs:

MTH123

Or Test & Score: Compass Algebra - 055

Business/ Entrepreneurial

Business Mgt/Entrep

MKT221 SALES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The selling process is introduced in detail. Securing and opening the sales interview, delivering the sales presentation, answering objections and closing the sale are all incorporated during the semester. The student will be required to give a sales presentation in class. Upon completion, students should understand the selling process and be able to make an effective sales presentation.

Pre-reqs:

Or ENT121

Information Tech

Computer Science

Information Tech

Computer Science

CSE122B PROGRAMMNG LOGIC &PROB SOLV B

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with the coding of iterations, arrays, procedures and programming constructs. Upon completion students should have an understanding of the following constructs: iterations, arrays, procedures and how to use them in program coding.

Pre-reqs:

Or CSE122A

CSE231A JAVA PROGRAMMING A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to software programming logic and problem-solving techniques using the Java programming language. ECA223A requires you to install the Java Development KIT(JDK) on your home computer or have access to computers somewhere else which have the JDK installed. Sequential, conditional and repetitive logic constructs are central topics.

Pre-reqs:

ECA127

CSE228 ASSEMBLY LANGUAGE PROG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The relationship between software languages and computer architecture is presented. This course examines assemblers, specification and translation of programming languages, linkers and loaders, block structure languages, parameter passing mechanisms and a comparison of programming languages. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA222

Computer Security

Information Tech

Computer Security

IMT264 IMAGE MANAGMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn the essentials of professional digital photography for managing, adjusting and publishing small and larger volumes of digital photographs. This hands-on course takes students through a non-destructive professional editing workflow to fine tune photos with precise management tools and methods.

Pre-reqs:

IMT132

Health and Human Services

Respiratory Therapy/MIST

RCT225 CLIN PRACT SPEC ROT/SEM

Credit Hours: 5 Contact Hours: 25 Lecture Hours: 1 Lab Hours: 3 Other Hours: 21

Clinical experiences provided include management of the critically ill adult, pediatric, and newborn patient, as well as specialty care areas of respiratory care. Students also participate in clinical simulation scenarios, computer based practice sessions for the NBRC credentialing examinations required to become a registered respiratory therapist, and advanced cardiac life support certification courses. The seminar component consists of a guest speaker series covering specialty topics in the field of respiratory care.

Pre-reqs:

RCT224

Information Tech

Computer Science

CPD222 MCRSFT SQL SERVER DTBSE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server. Through a system of lessons and hands-on exercises students will gain practical experience using Transact-SQL and Data Transformation Services (DTS) to manipulate data; programming business logic using stored procedures, transactions, triggers, user-defined functions, and views; optimizing database performance by using SQL Profiler and the Index Tuning Wizard; and Managing security--data access, object-level security, and application roles. As students build these real-world database skills, they will also be prepared for the corresponding Microsoft (MCITP) certification exam.

Pre-reqs:

Or CPD121

Information Tech

Computer Science

CPD221 ORACLE DATABASE:PL/SQL PR

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

PL/SQL programming & tuning is an intense hands-on course that is designed to give the student maximum exposure to Oracle PL/SQL tuning and optimization. The student learns by doing dozens of in-class exercises and the student will be guided from very simple PL/SQL tuning to advanced PL/SQL performance optimization. The topics start with the basics of SQL and progress into increasingly complex queries, including table joins, subqueries and creating Oracle views. The PL/SQL section begins with simple concepts and the student gradually masters PL/SQL through increasingly challenging classroom exercises.

Pre-reqs:

ECA142

CPD121 DATA MODELING AND DATABSE DSGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces database concepts and describes how to properly design, create and interface with a relational database. The course begins with definition of important terms. It demonstrates the specific rules that one must follow to design and create a normalized relational database. SQL is also an important topic. Students complete a collection of hands-on labs to learn how to apply the techniques presented.

Pre-reqs:

Or Test & Score: Compass Reading - 080

SGE221 ADV GAMING AND SIMULATN TOPICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course explores topics in the area of 2D and 3D game programming. The students will develop a variety of software projects related to the gaming and simulation areas.

Pre-reqs:

ECA224

Information Tech

Computer Science

WDD123 Internet Design Tools

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to tools that are used in the Industry to develop and code websites. Graphic development with industry standard photo editing software is also introduced. Upon completion of this course, the student will have mastered implementation of web coding software to rapidly develop web sites.

Pre-reqs:

Or WDD121

Administrative Srv Off Applion

ITD105 Computer Applications - Excel

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the use, styles and features of graphic presentation programs. Upon completion, students should be able to utilize MS Excel as a basic business tool.

Pre-reqs:

ITD100

Health and Human Services

Nursing

NUR223 NUR CARE PERSON/ALT III

Credit Hours: 8 Contact Hours: 14 Lecture Hours: 3 Lab Hours: 11 Other Hours: 0

This course continues to develop the knowledge base necessary for nursing practice. Initially, the course focuses on the nursing care of clients with more complex and acute health problems. Emergency nursing principles are introduced. Management concepts, the organization as a system and the nurse as a manager of client care are subsequently addressed. Application of these concepts is facilitated through a preceptorship. This directed nursing practice will assist in role transition from student to beginning associate degree nurse.

Pre-reqs:

NUR222

Fire and EMS

Health and Human Services

Fire and EMS

EMS122 PARAMEDIC I/SEMINAR

Credit Hours: 9 Contact Hours: 11 Lecture Hours: 8 Lab Hours: 3 Other Hours: 0

This course is first in a four-course sequence. Content in the sequence follows the objectives for paramedic education according to the Ohio Administrative Code 4765 and includes the knowledge and skills required to perform patient assessment and management of medical and traumatic emergencies by performing rapid assessment, interpretation of data, and advanced intervention, for patients of all ages from neonates to geriatrics. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

BIO101

Business/ Entrepreneurial

Business Mgt/Entrep

MKT235 INTRODUCTION TO LOGISTICS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces the student to the role of logistics in national and multinational business and government activities. A variety of analytical tools and techniques useful in solving logistics will be explored. The student will understand the individual components of logistics and their interrationalships within individual companies and within the supply chain.

Pre-reqs:

ACC127

Accounting/Finance

FIN123 FUND FINANCIAL SERVICES

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces the student to the discipline of personal financial planning and to the various services which support the planning process. The tools and techniques of those services are addressed from two perspectives: (1) a professional occupation and (2) individuals developing and implementing their own long-range financial plan. Specific topics include understanding the financial planning process, ethical and professional considerations in financial services, and introductions to the fundamentals of credit, insurance, investments, and retirement and estate planning. Upon successful completion of this course, the student should understand the fundamental concepts of personal financial planning.

Pre-reqs:

Or Test & Score: Compass Reading - 080

And BUS123 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

PSY222 Psy Aspect of Therapy

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Covers the general principles of interaction with a specific focus on those unique challenges confronting the patient and the health care provider. Attention is given to the psychosocial needs of both the patient and the health care provider. Issues of communication, patient-provider relationships, patient dependency, personal values, and relating to people from differing cultures, ages, and special needs are discussed.

Pre-reqs:

IDS102

PSY121 GENERAL PSYCHOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Surveys the scientific study of behavior, addressing a wide range of traditional topics including introduction and research; perception; consciousness; learning; cognition; personality; pathology/treatment; development; biological basis of behavior; social and organizational psychology. Emphasizes classical and current theory and research with selected attention to practical application.

Pre-reqs:

Or SOC121

Sciences

Biology

BIO101A INTRO TO ANAT AND PHYSIO A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 1.5 Lab Hours: 0 Other Hours: 0

Introduction to Anatomy and Physiology provides an understanding of human structure and function of all body systems. Focus will be given to beginning chemistry principles, cells, and tissues. Module one covers chemistry and the following body systems (Integumentary, Musculoskeletal and Nervous control system). This course is for the student who has little or no background in human anatomy and physiology.

Pre-reqs:

IDS102

Information Tech

Computer Security

Information Tech

Computer Security

NET245 MICROSOFT NETWORKING II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course covers administering a Microsoft server operating system. Students will demonstrate skills necessary to administer an infrastructure in an enterprise environment. Topics include implementing group policies, managing user accounts, managing domain services, DNS, and remote access.

Pre-reqs:

NET244

NET244 MICROSOFT NETWORKING I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course covers installing and configuring a Microsoft server operating system. Students will demonstrate skills necessary to implement a core infrastructure into an existing enterprise environment. Topics include working with Active Directory, implementing local storage, implementing file and print services, and implementing server virtualization with Hyper-V.

Pre-reqs:

Or ECA145

NET131 MICROSOFT CLIENT OPERATNG SYS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course includes installing and administering the Windows Operating Systems. It also covers security issues, installation troubleshooting, desktop issues, and desktop configuration.

Pre-reqs:

Or ECA145

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

PLS222 FAMILY LAW

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on family law, with an emphasis on the paralegal's roles and responsibilities in family law cases. Topics include premarital agreements, divorce and dissolution, spousal support, child support, child custody, enforcement, and adoption.

Pre-reqs:

PLS121

Education

EDU130 INTRO TO THE TEACHING PROFESSN

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This survey course is an introduction to the teaching profession. Students engage in a variety of experiences that broadly explore the purposes of schools in society and the knowledge, dispositions, and performances required to be an effective teacher today. Ten observation hours required. TAG approved course OED001, effective Summer 2013. CTAG approved course CTED001, effective Summer 2013.

Pre-reqs:

ENG105

Or Test & Score: ACT English - 18

Health and Human Services

Medical Lab

MLT227 MLT SEMINAR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Topics include professional development, creating resumes and cover letters, discussions of experiences at the clinical sites, discussions of problems that occur in the workplace and problem resolution. The topics of the certification process, professional ethics in the laboratory, and other related topics are included.

Pre-reqs:

MLT223

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC227 PAYROLL ACCOUNTING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is the first course in a two-course sequence in payroll accounting. This course is focused to the Fundamental Payroll Certification and upon completion of the two courses the students should be prepared to take the Fundamental Payroll Exam, administered by the American Payroll Association. Specifically, this course covers the study of payroll, records keeping regulations, tax reporting requirements, accounting procedures and journal entries, and mandatory deductions of various taxes. Also covered is the employer's related taxes and preparation of various payroll tax forms, the Fair Labor Standards Act, and other Federal and State laws that regulate payroll.

Pre-reqs:

Or ACC132 Can be Taken Concurrently

Information Tech

Computer Science

CSE225 CROSS-PLATFORM MOB APP DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines the various methods for developing mobile applications that are compatible with various operating systems. Coding with frameworks that allow for deployment across different systems will be conducted. Upon completion of the course, students should understand how to create mobile applications that will function on different mobile and handheld devices.

Pre-reqs:

ECA234

Health and Human Services

Dental Hygiene

DHY132 DENTAL HYGIENE THEORY I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Builds upon fundamentals to provide further study of dental hygiene practices including, but not limited to, dental specialties, treatment planning and management of medical/dental emergencies.

Pre-reqs:

DHY131

Health and Human Services

Dental Hygiene

DHY234 CLINICAL DENTAL HYG III

Credit Hours: 5 Contact Hours: 16 Lecture Hours: 0 Lab Hours: 16 Other Hours: 0

Supervised clinical patient care experiences that correlate with, and allow application of, dental hygiene procedures and lecture concepts presented in Dental Hygiene Theory III. Development of proficiency in implementing treatment plans to meet individual patient's oral health needs. Emphasis on self-evaluation and quality assurance.

Pre-reqs:

DHY232

Information Tech

Computer Science

CSE233A C++ PROGRAMMING A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course focuses on software engineering concepts, control structures, and functions found in C++. Principles of good software engineering are emphasized. Hands-on labs prepare students to solve real-world problems.

Pre-reqs:

Or CSE122B

Business/ Entrepreneurial

Business Mgt/Entrep

MGT121 PRINCIPLES OF MANAGEMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an in-depth, balanced overview of management through coverage of basic management functions: planning, organizing, staffing, directing and controlling. Presents the current insights of open-systems theory, contingency theory, organization theory, organizational behavior and contemporary management science. Upon completion, students should be able to demonstrate an understanding of the above topic areas.

Pre-reqs:

Or ENT120

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS223 Criminal Procedure

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines criminal procedure and related concepts. Topics include the constitutional protections of the 4th, 5th and 6th amendments to the U.S. Constitution as well as the criminal justice process from arrest to conclusion.

Pre-reqs:

CJS121

Business/ Entrepreneurial

Business Mgt/Entrep

CUL222 Advanced Cookery-Prep IV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides students the opportunity to develop advanced cooking skills and use advanced techniques in food preparation. Students will study cooking methods and food preparation of other cultures to develop an understanding in depth of flavors and techniques used in more complex recipes.

Pre-reqs:

CUL221

Educ/ Liberal Arts/ Math

Education

EDU122 CURRICULUM DESIGN AND INS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Studies theory and practice of instructional design and delivery for children birth to eight. Goal-setting, curriculum design, lesson planning and instructional methods based on NAEYC guidelines. Emphasis is placed on developmentally-appropriate, integrated and thematic instruction. Skill development is fostered in observing and recording behavior and evaluation/assessment of children's needs, levels and progress. Includes use of a wide range of educational media. Fifteen observation hours required.

Pre-reqs:

EDU131

Educ/ Liberal Arts/ Math

Education

EDU127 INFANT AND TODDLER GROUP CARE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The needs of infants and toddlers are unique. This course introduces principles of development and the fundamental needs of children from birth to three who are in group care settings. This class will explore ways of creating environments for infants and toddlers group care that fosters optimum social, emotional, physical, and congnitive development. Five observation hours required.

Pre-reqs:

EDU131

Information Tech

Administrative Srv Off Applion

AOT127 WP-MICROSOFT WORD

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, functions, and features of the Microsoft Word program. Creating, editing and storing text are emphasized. Upon completion of this course, the student should be able to produce a variety of professional-looking documents.

Pre-reqs:

AOT121

AOT237 LEGAL OFFICE APPLICATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed for students to gain practical experience in preparing legal documents selected from actual cases, review general information about the tasks assigned, follow established procedures and learn the job responsibilities of a legal assistant through simulated activities. Fundamentals of grammar and punctuation skills, as well as the formatting of legal documents, are emphasized. Upon completion, students should be able to perform legal office responsibilities and produce a variety of legal documents using word processing, spreadsheet, database, and presentation software packages.

Pre-reqs:

AOT239

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

CUL125 MENU PLANNING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers key concepts of menu planning including: design, writing, costing of menu items, marketing and merchandising of a menu. Trends in the industry are explored as well as research, surveys and sales analysis that are key to menu planning.

Pre-reqs:

CUL119

Educ/ Liberal Arts/ Math

Mathematics

MTH106 Math for Technology

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed for students in computer science and information technology. Areas of focus will include: sets and Venn diagrams, numbering systems, logic, graphs, greedy algorithms, counting principles, combinatorics, discrete probability, sequences, and series.

Pre-reqs:

And MTH092

Education

ASL124 AMERICAN SIGN LANGUAGE II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is the second in a series of three courses. This course acclimates the student to the visual/gestural modality of American Sign Language. Students will utilize a practical approach to teach vocal, grammar, and cultural aspects through the daily practice of expressive and receptive skills. Ten observation hours are required.
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Pre-reqs:

And ASL125 Can be Taken Concurrently

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH108 Explorations in Modern Mathema

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce the student to the beauty and utility of mathematics in everyday life. The student will be able to reason critically, think creatively, assess evidence from conclusions, and use skills in abstract and quantitative thinking. Topics covered in this course will be: Thinking critically, numbers in the real world (percentages and index numbers), managing your money, statistical reasoning, describe statistical data using measures of center and spread, statistical inference, the normal distribution, solve basic probability applications, mathematics and business.

Pre-reqs:

MTH091

MTH105 Math for Allied Health

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to provide health science students with the mathematical skills and concepts required to be successful in allied health fields. Topics covered in this course will be: allied health applications, metric conversions, apothecary and household systems, systems of measurements, use of formulas, dimensional analysis, percent, decimals, fractions, ratios and proportions, direct and inverse variation, solutions, dosage calculations, allied health graphs, scientific notation, and statistical concepts.

Pre-reqs:

Or Test & Score: Compass Algebra - 039

Education and Human Serv

Education

EDU131 Intro to Child Development

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction of the characteristics and needs of young children from prenatal stages through age eight. Typical growth and development, developmental variations, and influences on development are examined by exploring physical, cognitive, social, emotional, and language domains. Historical and contemporary theories and research that support the importance of play, environments for learning, relationships, and the role of the teacher are presented. Fifteen observation hours are required.

Pre-reqs:

Or Test & Score: Compass English - 050

Information Tech

Computer Security

Information Tech

Computer Security

NET137 Routing & Switching Essentials

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the basics of routing and switching. Course topics include implementation of VLAN's, inter-VLAN communication, VLAN Trunking Protocol, RSTP, static routing, an introduction to dynamic routing protocols and routing between networks. Essential network concepts including ACL's and advanced subnetting are also covered.

Pre-reqs:

NET121

Computer Science

CIS126 FUNDAMENTALS OF INFO SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to familiarize students with core information systems principles and practices. Topics include, but are not limited to, types of information systems, hardware and software, data modeling, database systems, internet technologies, systems development, careers, global and social impacts, and industry trends.

Pre-reqs:

Or ITD105

CIS125 DATA ANALYSIS AND DECISION MAK

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on key technological areas used for the analysis and transforming of data into actionable information. Students will learn advanced database and data manipulation concepts relating to the storage, retrieval, and analysis of information. Popular tools will be utilized to evaluate various data sources, define business dimensions, store transactions, produce results and transfer data. Upon successful completion of this course, students will be prepared to leverage the power of these tools to perform data analysis.

Pre-reqs:

And ITD106

Information Tech

Computer Science

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

Or CSE227

Sciences

Biology

BIO242 CELL AND MOLECULAR BIOLOGY

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

Cell and Molecular Biology will explore various principles of cell structure and function. Topics include energy and metabolism, protein structure and function, and the fundamentals of molecular biology that contribute to genetic inheritance and diversity within organism populations. A supporting laboratory aligns with lecture topics and includes observation of plant and animal cell structure, analysis of metabolic processes, analysis of genetic inheritance patterns and their influence on population diversity, and basic molecular biology techniques.

Pre-reqs:

BIO141

Information Tech

Computer Security

NET251 VOICE OVER IP FUNDAMENTLS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will introduce students to the fundamental concepts of Voice over IP systems. Demonstrations and hands-on practice will reinforce topics including connectivity to legacy systems, quality of service, H.323, SIP, MGCP signaling, dial peers, and voice quantization. Upon completion, students will be able to identify VoIP components and configure analog to digital voice system.

Pre-reqs:

NET137

Information Tech

Computer Security

NET253 SEC NTWK SWITCH AND ROUTERS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will introduce students to security topics and best practices on switches and routers. Demonstration and hands-on practice will reinforce topics including secure communications using IPSec and VPNs, Cisco IOS security, and identity based services. Upon completion, students will be able to implement layer 2 and 3 security, create secure lines of communication, and deploy threat defense using the Cisco IOS.

Pre-reqs:

NET137

IMT268 ADVANCED VIDEO EDITING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will begin with the history and significance and editing through the development of new technologies and nonlinear editing. It will cover theory and practice utilizing the industry standard editing software proram. The course will introduce advanced methods of editing and effects for the students, including multi-camera editing, color correction, and transitions.

Pre-reqs:

IMT223

Engineering Tech

Engineering/Applied

IET270 DIM METROLOGY AND INSPECT I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an in-depth study of measuring principles, instruments, and techniques. The measuring instruments most commonly used in industry, including coordinate measuring machines, are covered. Emphasis is placed on proper use of equipment in terms of prevention and minimization.

Pre-reqs:

And Test & Score: M094 Transfer Prof/Placement - 2

Health and Human Services

Respiratory Therapy/MIST

Health and Human Services

Respiratory Therapy/MIST

MIS125 MIS I/DIRECTED PRACTICE

Credit Hours: 2 Contact Hours: 10 Lecture Hours: 0 Lab Hours: 10 Other Hours: 0

This course provides the student the technical competency skills in identification of surgical implementation, standards of practice, decontamination procedures, infection control, and disinfection. This directed practice orients the student to the work environment in the central service processing area of the hospital/surgery center.

Pre-reqs:

MIS124 Can be Taken Concurrently

Engineering Tech

Engineering/Applied

ARL237 ADV COMPRESSOR COATING PROC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course builds on the compressor coating processes course to teach coating processes of large and mid- sized units. The course also addresses maintenance and troubleshooting of automated paint equipment and paint booth environments.

Pre-reqs:

ARL143

Health and Human Services

Dietary Management

DTR122 LIFE CYCLE NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Nutrition concerns, needs and issues over the entire life span from conception through life are covered in this course. The course materials focus on nutrition during pregnancy, infancy, childhood, adolescence and adulthood. Each life span section covers specialized concerns for that state.

Pre-reqs:

NTR121

Health and Human Services

Dietary Management

DTR223 NUTRITION/MNT DIRECTED PRACTIC

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 0 Other Hours: 2

Under the supervision of a registered/licensed dietitian, the student will complete 160 hours of directed practice in a clinical setting, within a 16 week semester. The student will shadow the dietitian and observe the Nutrition Care Process, including the process of nutrition assessment, diagnosis, intervention and evaluation and monitoring. During this rotation, the student will also review charts for medical record documentation, anthropometric data, food-drug interactions and the interpretation of laboratory values. The student will work with the dietitian in examining and participating in the role of the Dietetic Technician in the prevention and treatment of illness and chronic diseases. Applications of treatment will be observed in the management of diseases.

Pre-reqs:

And DTR221 Can be Taken Concurrently

DTR225 COMMUNITY NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction to the program planning, policies, resources, and nutrition issues specific to community nutrition. The student will also be provided with an understanding of creating and implementing nutrition programs for various life cycle stages.

Pre-reqs:

DTR221

Information Tech

Computer Security

IMT256 DIGITAL IMAGING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on both vector and raster graphics for screen based graphics. Course focuses include: graphics for video, graphics for presentations, image formatting, digital photo editing, pattern and texture creation, image optimization, and vector raster graphic integration techniques. Upon the completion of this students will understand of how to merge design technologies to create professional quality screen graphics.

Pre-reqs:

And IMT132

Health and Human Services

Physical Therapy

Health and Human Services

Physical Therapy

PTA122 MUSCULOSKELTAL ANATOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

An in-depth study of the musculoskeletal system including: anatomical terms, bone and bony landmark locations; articulations: skeletal muscle locations and actions; the actions and planes of movement available at the joints; and the types of muscle contractions which can occur at the synovial joints. A basic study of skin is presented. Laboratory activities, cadaver studies and practicals are a required component of this course.

Pre-reqs:

BIO123 Can be Taken Concurrently

PTA222 PTA PROCEDURES II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

This course will present to the students the impairments, disabilities, functional limitations, and interventions of selected musculoskeletal, rhematological and cardiovascular conditions including spinal disorders and amputation. Also included, will be an overview of CNS anatomy, physiology, and pathology, sensory integration, motor development and motor control. Laboratory activities, written assignments and competencies, are required components of this course. Students will perform selected therapeutic interventions with patients under direct PT/PTA supervision as part of laboratory component of this course.

Pre-reqs:

And BIO124

Engineering Tech

Engineering/Applied

IET270 DIM METROLOGY AND INSPECT I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an in-depth study of measuring principles, instruments, and techniques. The measuring instruments most commonly used in industry, including coordinate measuring machines, are covered. Emphasis is placed on proper use of equipment in terms of prevention and minimization.

Pre-reqs:

Or Test & Score: Compass Algebra - 042

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT174 HONDA BRAKING SYSTEMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers Honda-specific diagnostic and repair techniques necessary to service Honda braking systems. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper braking system inspection and repair procedures. Hands-on practice will enable the students to apply these concepts to Honda vehicles. Special emphasis is placed on the health and safety aspects related to automotive brake service.

Pre-reqs:

AUT124	Can be Taken Concurrently

AUT176 HONDA HVAC SYSTEMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers Honda-specific diagnostic and repair techniques necessary to service Honda automotive HVAC systems. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper HVAC system inspection and repair procedures. Hands-on practice will enable the students to apply these concepts to Honda vehicles. Special emphasis is placed on the environmental and safety aspects related to automotive HVAC service.

Pre-reqs:

AUT125	Can be Taken Concurrently

AUT185 CAT INTERNAL COMBUSTION ENGINE

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The purpose of this course is to allow the students to build the skills necessary to accurately diagnose and repair CAT lift truck internal combustion engines. The course covers component descriptions, fuel systems used, how 4 cycle engines work, compression ratios, air filters and PCV valves and basic troubleshooting guidelines. Fuel, ignition, and cooling system service and operation are also covered. Major emphasis is placed on in-unit service and repair of CAT (IC) engine systems. The instructor will demonstrate CAT (IC) engine diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121	Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

AUT281 CAT DIFFRNTILS AND FRONT AXLES

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The purpose of this course is to provide the student with an understanding of the skills and procedures necessary to accurately diagnose and repair drive axles and differentials used on lift trucks. The course covers component identification, precision measurements of components, proper setup and adjustment, and functions of these components. The instructor will demonstrate CAT differential and axle diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. The course concludes with a description of routine maintenance procedures, troubleshooting guidelines, and a self- assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

AOT128 DPT-MICROSOFT PUBLISHER

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts and applications of desktop publishing using Microsoft Publisher. Emphasis is placed on the creation of various types of high-quality documents that combine text and graphics. Upon completion, students should be able to design and produce professional business documents and publications.

Pre-reqs:

Or BCA220

Or AOT131

Or ITD220

AOT238 WEB DESIGN FOR OFFICE PROF

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, design, and application for web-page publishing. Students will produce web pages by combining text, graphics, and scanned images. Upon completion, students will be able to design and produce professional web pages using advanced publishing features.

Pre-reqs:

And IMT122

Information Tech

Administrative Srv Off Applion

ITD122 COMPUTER APP FOR PROFESSNL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Computer Applications for Professionals describes the components and peripherals of a computer/PC and how they function and communicate as a system. Principle topics covered are the Windows operating system, Internet applications, the Windows networking environment and a variety of software application packages used to solve scientific, business, and engineering technology problems.

Pre-reqs:

Test & Score: Computer Test - 18

Or ITD100

Business/ Entrepreneurial

Business Mgt/Entrep

MGT122 Introduction to Sports Mgt

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce students to the sports management major and the foundations of sports management as a field of study from high school to the international arena. This course will examine areas such as the history and philosophy of sports, business principles, and various private and public sector career opportunities in the sports and recreation industry.

Pre-reqs:

BUS121

Engineering Tech

Engineering/Applied

ENV225 SOLID AND HAZ WASTE SMPLG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the methods and procedures of managing solid and hazardous wastes according to applicable federal regulations such as the Resource Conservation and Recovery Act. Included will be the study of physical facilities and operational standards of sites that treat, store and dispose of solid and hazardous wastes. Case studies will be used to determine the methodologies of waste stream audits, pollution prevention, permitting and land ban determination.

Pre-reqs:

CHM121

Engineering Tech

Engineering/Applied

ENV222 INDUST PROCES & POLUTION CNTRL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the students to environmental control systems and practical applications of their operation and maintenance. Particular attention given to piping and instrumentation diagrams, the reading of strip charts, continuous emission monitors, stack and source sampling and volumetric measurement of fluids. General troubleshooting techniques are also covered.

Pre-reqs:

And MTH107

ENV224 AIR SAMPLING-ANA & CONTR

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will review the standard methods of air sampling for gases and particulate matter. Students will learn proper monitoring equipment selection, operation and maintenance. Laboratory experience will emphasize sampling techniques, data collection and proper reporting methods. A broad overview of all aspects of air pollution will be included.

Pre-reqs:

Or CHM141

Educ/ Liberal Arts/ Math

English

CHN200 Elementary Chinese II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers intermediate reading, speaking, writing, and listening, and application of those skills for Mandarin Chinese.

Pre-reqs:

CHN100

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

SOC228 Soc Structure & the Individual

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the reciprocal relationship between the individual and society. Topics covered include: the nature and scope of sociological social psychology, symbols and symbolic communication, the structure of social interaction, the development of self and identity, small group processes and collective behavior, and the production of social structure and culture. Special consideration will be placed on interaction in organizational contexts, such as schools, workplaces, and policy decision arenas.

Pre-reqs:

SOC121

SOC230 Applied Sociological Methods

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce students to basic sociological research, and test their proficiency in applying theory, research methodologies, and data analysis. The course begins with a brief synopsis of sociological theories and perspectives that can be used to identify and frame social problems and issues. A variety of quantitative and qualitative research methods will be introduced, and a number of statistical analytic techniques will be presented as options for consideration in data analysis. Throughout the course, students will be expected to isolate a problem or issue amenable to sociological analysis and develop a research project in order to demonstrate proficiency in applied sociological research.

Pre-reqs:

SOC123

And SOC227

Health and Human Services

Respiratory Therapy/MIST

MIS126 MEDICAL INSTR STERILIZATION II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course presents the student with an exposure to the technical functions of the field of central service processing/medical instrument sterilization with emphasis on surgical instrumentation, assembly of instruments, sterilization procedures, standards of practice, operations, inventory, distribution and product standardization.

Pre-reqs:

MIS124

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH124 Statistics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

Or MTH123

English

ENG124 COLLEGE COMPOSITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course emphasizes writing based on reading response with review of essay development, grammar, and punctuation. Emphasis is on the process of drafting, revising, and editing to achieve clarity. A research project requires APA or MLA documentation. TMEC Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: Compass English - 070

Or ENG011 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

ITD102 Computer Applications - Word

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the use, styles and features of word processing programs. Upon completion, students should be able to utilize MS Word as a basic business tool.

Pre-reqs:

Or Test & Score: Computer Class HS - 2

Or Test & Score: Computer Test - 18

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KHIS110 History of Civilization I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering

MET225 MANUFACTURING PROCESSES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Students will investigate a variety of manufacturing techniques including casting, powder metallurgy, metal forming, hot and cold working, arc and gas flame welding, rapid prototyping, microelectronic manufacturing, and chip-type machining processes. Scheduled tours of local industry and/or guest speakers augment the material for the traditional format. The web 3 format will replace tours with DVD review and reflection assignments of all manufacturing processes. CTAG CTME010 approved Spring 2012.

Pre-reqs:

Business/ Entrepreneurial

Business Studies

BTD223 BUSINESS CO-OP

Credit Hours: 3 Contact Hours: 30 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Co-op opportunities are available to students enrolled in Business Technologies. Students may contact their faculty advisors or Career Services for more information.

Pre-reqs:

Information Tech

Computer Security

Information Tech

Computer Security

NET120 PC UPGRADING AND MAINTENANCE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The student will be working with various operating systems such as DOS, Windows 98, 2000 and XP. Student will also have hands-on experience building and repairing PC's in a lab environment. Hardware topics include: system board, microprocessors, busses, memory, disk drives, and power supplies.

Pre-reqs:

Educ/ Liberal Arts/ Math

Education

ASL125 FINGERSPELLING

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will offer students an opportunity to develop their receptive and expressive fingerspelling. Basic proficiency of the American Manual Alphabet and Numbers used in conversational settings will be taught. Five observation hours required.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT241 BODY CONTROL SYSTEMS

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course reviews the advanced concepts and applications of multiple body controllers with multiple inputs and outputs. Communication languages, multiplexing, and complex networks in automotive applications are also presented.

Pre-reqs:

Sciences

Biology

Sciences

Biology

BIO129 METEOROLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An introductory science course designed to familiarize students with the basic facts, theories, and methods relating to the study of meteorology. This course will focus on the principles of the natural world and the causes of weather. Students will apply these principles by analyzing and interpreting the effects of the atmosphere on our natural and human ecosystems using real-time data from the National Weather Service. This course will also analyze the effects of various human activities upon weather and the global system.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT428 GM ENGINE REPAIR CERT ASSMT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the skills necessary to work with engine systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing engine systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in the course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Engineering Tech

General Engineering

PET141 Oil and Gas Lease Operations

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This class will provide an overview of lease operation methods utilized at producing petroleum well sites. Emphasis will be placed on recovery techniques, surface handling and treatment of reservoir fluids, surface equipment, preventative maintenance, measurement devices, and safety. Students will be responsible for analyzing charts and diagrams and calculating various flow volumes and pressures associated well operations.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS233 STANDARD FIRST AID

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on standard first aid practices and procedures. CTAG approved Spring 2012 CTBPO.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL144 CYLINDER HYDROTESTING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the basic knowledge and skills required to successfully hydrotest cylinders for compressor operations. Students will evaluate work orders and understand the requirements for each job as dictated by the work order. They will complete all steps required to prepare a cylinder for hyrdrotesting. They will learn how to execute the test process and then close out a test with final documentation.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KART140 2-D Composition

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KART220 Art History I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT191 Automotive Co-op 1

Credit Hours: 2 Contact Hours: 24 Lecture Hours: 0 Lab Hours: 24 Other Hours: 0

Cooperative work experience opportunities are available to students enrolled in Automotive Department programs. Students may contact the Automotive Department Program Coordinator for specific information regarding co-op opportunities. During this course students will gain practical work experience by performing automotive general maintenance and light repair at a sponsoring automotive repair facility.

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM126 INTRO TO MASS COMM

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the role of media in contemporary, political, and cultural contexts as well as the global stage. Topics of study include the evolution of media technology, relationships between mass communication and other forms of communication, and the philosophical and ethical issues that arise in mass communication. TAG approved Spring 2012 OCM006.

Pre-reqs:

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KSOC999 Social Sciences

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Business Studies

BTD228 SPECIAL TOPICS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Special topics in Business Technology Division. Repeat registration permitted.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KSCI9990 Basic Sciences

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Health and Human Services

Physical Therapy

Health and Human Services

Physical Therapy

PTA227 DIRECTED PRACTICE III

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Selected clinical experience in various physical therapy settings under direct supervision. Grading: Credit/Fail

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT212 AC DELCO ADV DRIVABILITY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (WBT) related to vehicle drivability concerns. This course is intended for experienced ACDelco TSS technicians and concentrates on vehicle OBD service programming and advanced drivability-related diagnostics. The instructor will demonstrate advanced drivability diagnosis, servicing, and repair techniques. An in-depth overview of OBD system programming, operating parameters, systems monitors, an self-diagnostics will accompany hands-on practice. On-vehicle testing will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMTH999 Math and Critical Reasoning

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT134 FORM DESIGN ESSENTIALS

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course is designed to introduce entry-level skills in creating effective form development. Topics discussed are forms analysis, layout, design, sequence of information, column design, electronic forms, hard copy forms, and web-based forms. Upon successful completion of this course, students should have a greater knowledge base of how to create electronic and print forms for any organization.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT203 AC DELCO GM OBD-II DIAGNOSTIC

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (CBT) related to GM OBD-2 computer control systems. This course is intended for experienced ACDelco TSS technicians and concentrates on vehicle ECM/PCM diagnostics. The instructor will demonstrate GM-OBD-2 related diagnosis, servicing, and repair techniques. An in-depth overview of OBD-2 operating parameters, emission systems monitors, and self- diagnostics will accompany hands-on practice. On-vehicle testing will enable the students to apply these concepts and procedures to current vehicles. The course will conclude with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KHUM99 Humanities Core Course

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS259 Major Ensemble

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT214 ACDELCO ELECL CIR DIAG AND REP

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Building upon the technician's knowledge obtained in the related ACDelco electrical web courses, this instructor led course utilizes class discussion and lab exercises. Addressing the various technician knowledge and skill levels, numerous exercises and activities are utilized to tailor the participant's individual learning experience. These exercises and activities explore electrical circuit theory and operation, as well as diagnostic repair procedures. Topics include: circuit types, electrical circuit troubleshooting, and DMM usage for determining voltage drop, resistance, and amperage. Also included is an overview of connector and terminal repair procedures, and, proper use of terminal testing and repair tools. Exercise assigned by the instructor ar comprised of: desk, case study, on-vehicle, computer simulation and work bench exercises.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV155 WATER DISTRIBTN SYS-WATR QUALT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The specific topic of this course is that of water quality for distribution systems. Along with reading assignments from the text, the course is enhanced with audio, up-to- date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT253 COMPUTERIZED VEHICLE CONTROLS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed for Toyota dealership technicians and students that desire to become Toyota dealership technicians. The purpose of this course is to provide the student with an understanding of the skills and procedures needed to accurately diagnose and repair Toyota computerized engine control systems. The course text is divided into small modular sections making it easy for the student to absorb and apply the information in a logical manner. Each section ends with a student self-assessment worksheet covering the main topics in that section. The self-assessment worksheets contain theory-based questions and hands-on practice. A skill pretest is imbedded into the first worksheet. This is done to prepare the student for the course and demonstrate to the instructor the skill level of the student. The student will be required to complete 4 hours of out-of-class assignments and answer review questions. There will be two performance tests and a written final test.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KARF999 Fine Arts Core Course

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

TOY101 Intro to Toyota T-TEN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course is the introductory course for the Toyota T-TEN program. Throughout the class students will receive a general understanding of the automotive industry and more specifically what the roll of an automotive service technician is at a Toyota dealership. Shop safety, proper tool and equipment usage, precision measurement, fasteners, fastener repair, and proper shop attire will all be covered in this course. Students will be enrolled into the Toyota T-TEN online learning system as apprentice technicians and will be required to utilize the Toyota service information system as well as the Toyota online training portal. This course is a prerequisite for all other Toyota T-TEN classes.

Pre-reqs:

Health and Human Services

Occupational Therapy

Health and Human Services

Occupational Therapy

OTA121 FOUNDATIONS OF OT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Explains the profession of occupational therapy, the roles and functions of occupational therapy personnel, the areas of occupational performances and the theoretical basis of using goal-directed activities. Observation in local occupational therapy clinics is scheduled.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL223 MFG CELL LDSHP AND COMMUNIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to educate the student on the cellular manufacturing concepts and overall plant layout logistics & efficiencies. Machining family concepts will be discussed and explored in detail. The theory and application of leadership will also be explored in a manufacturing environment as well as the process of effective group communication and various communication models .

Pre-reqs:

Health and Human Services

Fire and EMS

FST224 LGL ASPECTS OF FIRE SERV

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

The focus of this course is on the legal rights, duties, liability concerns and responsibilities of the fire department while carrying out its function. Courtroom presentations, procedures and case studies will be included.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV162 WASTEWATER TRTMT-SUSP GRTH SYS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of wastewater treatment. The topics of this course include general issues regarding suspended growth systems. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

ENV231 OSHA 30 HOUR GENERAL INDUSTRY

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is designed to develop an understanding of site occupational health and safety programs. This 30-hour comprehensive course is ideal for anyone with safety and health responsibilities and for employee safety and health awareness. This course covers all the topics in the OSHA 10-hour General Industry course plus additional OSHA approved topics. Participants who attend the required time and pass a final examination receives a certificate of completion.

Pre-reqs:

Sciences

Biology

BIO141 GENERAL BIOLOGY I

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

Explores general biological structures and processes experienced by all living things. Topics include: Organization of life from sub cellular to systems homeostasis, how cells harvest energy and the fundamentals of molecular biology that drive genetic inheritance, evolution and population diversity. Supporting laboratory aligns with lecture topics and includes: quan/qual analysis of biomolecules, observing plant and animal cell structure and function, basic genetic analysis and examination of population dynamics. TAG approved course-OSC024-Biology Sequence, effective Spring 2008. TAG approved course-OSC003, Biology I, effective Spring 2008.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ARL221 IND LAYOUT AND TRIGONOMETRY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course covers algebra, geometry, and trigonometry as they are applied in the machining industry. The Cartesian coordinate system will help in determining functions of angles greater than 90°. The course concludes with oblique angle trig (law of sines and law of cosines).

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS235 SELF DEFENSE II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on physical conditioning, self-defense, and subject control techniques.

Pre-reqs:

Engineering Tech

Engineering/Applied

PET132 PETROLEUM INSTRUMENTATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an overview of the latest procedures, practices, and equipment used in the measurement of petroleum products. The course provides a basic understanding of the metering equipment, techniques and calculations required to accurately measure liquid levels in storage tanks as well as flowing natural gas. Students will be introduced to tank gauging, sampling, and various metering devices such as head meters, turbine meters, orifice plate meters and venturi meters.

Pre-reqs:

Engineering

Engineering Tech

Engineering

MET229 ALT ENERGY SOURCES/FUEL CELLS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to alternative energy sources such as solar, wind, geothermal, hydro-electric, biofuel, and fuel cells. Nearly half of the courses addresses fuel cell topics such as components (anode, cathode, electrolyte, flow fields), fuels (hydrogen and hydrocarbons) and types of fuel cells (Polymer Electrolyte Membrane, Solid Oxide, Alkaline, Phosphoric Acid, Molten Carbonate). Laboratory experiences will include alternative energy and fuel cell experiments and writing laboratory reports.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT132 AUTO EXTERIOR DETAILING

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course has been designed to provide students with the knowledge and introductory experience required to detail the exterior of vehicles in the automotive industry. At the completion of this class, students should be able to choose and identify proper tools, cleansers, and other chemicals associated with vehicle exterior detailing. Students will learn the appropriate techniques of washing, cleaning, and waxing of all major exterior components on an automobile. Students are expected to follow all current safety standards including the application of all Material Safety Data Sheets (MSDS) chemical suggestions.

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM122 INTERPERSONAL COMMUNICATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the theory and application of interpersonal communication concepts and principles, emphasizing application toward becoming a more competent interpersonal communicator. Areas of study include perception, culture, listening, nonverbal communication, relationships, and conflict. This course is Ohio TAG approved. OCM002 effective Summer 2008. Ohio Transfer Module Approved effecfive Autumn 2008.

Pre-reqs:

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY131 FUND DENTAL HYGIENE PRAC

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

An introduction to dentistry, the dental hygiene profession, and ethical and professional patient care, terminology and basic skills utilized in the contemporary practice of dental hygiene, including infection control procedures and patient assessment and treatment are covered. Concepts are applied in a preclinical setting with manikins and student partners.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT142 AUTO ELECT SYS TOYOTA

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed for Toyota dealership technicians and students that desire to become Toyota dealership technicians. The course is designed to provide the student with an understanding of electrical terms, circuit concepts, and diagnostic techniques through the use of classroom instruction and hands-on training. Digital multi-meter usage is stressed. Instruction is given in wiring repair, batteries, starting, and charging systems. This course will emphasize: basic automotive circuit operation, circuit diagnosis, electrical circuit diagnosis, soldering techniques, wire and connector repair, Ohm's Law, circuit value conversions, wiring schematic interpretation, introduction to semi-conductors, and vehicle body circuits.

Pre-reqs:

Health and Human Services

Health Information

HIT227 PROFESSIONAL PR II/SEMII

Credit Hours: 3 Contact Hours: 11 Lecture Hours: 1 Lab Hours: 10 Other Hours: 0

Supervised professional practice experience in a healthcare facility which is designed to allow students to apply advanced HIM technical knowledge and skills learned in the classroom. Students complete additional assignments and meet in seminar to discuss issues and trends in the healthcare field which impact HIM practice; career management strategies and preparing for the national RHIT examination.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV132 WASTEWATER TREATMENT II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Using the internet, students will focus on issues of concern to wastewater treatment facilities. The topics of this course include activated sludge process control, sludge digestion and solids handling, nitrogen and phosphorus removal and odor control. Along with reading assignments from the text, the course is augmented with audio, photographs, interactive exercises and online tasks. This is a 100% web-based course.

Pre-reqs:

ENV125 INTR HAZRDS MTRLS AND WSTE MGT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to introduce the student to the hazards of all chemicals produced or imported as well as laws and regulations governing the management of solid and hazardous wastes. It is intended to satisfy training requirements of the OSHA Hazard Communication Standard (29 CFR Part 1910.1200(h)) and applicable EPA solid and hazardous waste regulations (40 CFR Part 260 through Part 265). Students that successfully complete this course receive a certificate of completion.

Pre-reqs:

Sciences

Biology

BIO126 SCIENCE/ENERGY AND THE ENV

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Utilizing interdisciplinary and theme-based learning, this course examines major environmental and energy problems and evaluates possible solutions to those problems. Topics include biodiversity, human population growth, water, air, and soil pollution, and hazardous and solid wastes. Emphasis is placed on cooperative learning, analytical thinking and problem-solving as students examine environmental issues. Laboratory and field experiences reinforce the basic ecological principles. TMNS Approved effective Autumn 2008.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

HVC121 HVAC PRINCIPLES I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Overview of heating, ventilating, and air conditioning, including basic design, equipment characteristics, venting, the refrigeration cycle, system control, basic heat transfer, basic airflow principles, air quality, product quality and comfort principles.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT245 VIBRATION CORRECTION

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers the theory of vibration, basic to advanced vibration diagnosis, and correction techniques. Specific topics include, usage of the electronic vibration analyzer (EVA), dial indicator, wheel balancer, and other current tools.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV135 WASTEWATER ANALYSIS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Using the internet, students will be introduced to basic laboratory safety and gravimetric, spectrophotometric, electrochemical, titrimetric, and microbiological methods. The units include instruction on the laboratory procedures for microscopic, coliform, BOD5, COD, ammonia, grease and oil, chlorine and solids analysis. Along with reading assignments from the text, the course is enhanced with up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Health and Human Services

Medical Lab

Health and Human Services

Medical Lab

MLT123 HEMATOLOGY I

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course covers basic hematological procedures. Topics include automated and manual blood cell counting techniques, red cell indices and morphology, reticulocyte counts, total eosinophil counts, platelet counts, erythrocyte sedimentation rates, normal white blood cell differentials and abnormal white blood cell differentials by using unknown blood samples, prepared abnormal slides, kodachromes and case histories. Also, reinforcement of venipuncture and finger stick techniques. Course will introduce the basic principles of hemostasis (coagulation) and the tests used to screen for disorders of hemostasis. TAG OHL009 approved Spring 2012. Must complete MLT123 & MLT124 to obtain TAG approval.

Pre-reqs:

Business/ Entrepreneurial

Business Studies

BTD201 BUS INDEPENDENT STUDY

Credit Hours: 1 Contact Hours: 10 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Business Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisory and dean for Business Technologies will determine course content, meeting schedules and credit hours.

Pre-reqs:

Health and Human Services

Fire and EMS

FST128 VOLUNTEER FIREFIGHTER

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0.5 Lab Hours: 1.5 Other Hours: 0

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

HVC227 HVAC FIELD INSTALL TECH PROC

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Laboratory intensive introduction to air conditioning system field installation techniques and procedures.

Pre-reqs:

HVC122 Can be Taken Concurrently

Health and Human Services

Health Information

HIT124 CLINICAL CLASSIFICATNS SYS I

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

ICD coding systems and the professional standards for coding and reporting diagnostic inpatient and outpatient services and inpatient procedure services; coding characteristics, conventions and guidelines will be applied in identifying and accurately assigning codes; manual and electronic applications and coding references will be utilized in the coding process; study of various nomenclature and classification systems used in the healthcare field.

Pre-reqs:

And BIO124 Can be Taken Concurrently

Engineering Tech

Engineering

EET126 ELECTRICAL MACHINES

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course covers the principles of electromagnetic induction, dynamo construction, direct current generation characteristics and operation, armature reaction, DC motor characteristics, operation and control, machine efficiency, single and three-phase transformers theory and operation, construction of three-phase transformers, AC motors and generators. Subjects include: polyphase transformers, induction motors, alternators, synchronous motors, single phase induction, universal and specialty motors.

Pre-reqs:

EET122 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

English

Educ/ Liberal Arts/ Math

English

ENG234 BRITISH LIT:1785 TO PRESENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers British literature from the Romantic to contemporary periods. Students will read, discuss, and write about works by British authors in their historical and cultural contexts. Emphasis will be placed on critical reading of the works and techniques used to analyze them. TMAH Approved effective Spring 2010. TAG approved OAH056 effective Summer 2010.

Pre-reqs:

ENG124

Social Sciences

PSY221 ABNORMAL PSYCHOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An overview of the range of human behavior, emphasizing current distinctions between normal and abnormal. Explores historical and contemporary cause-and-effect models with focus on current diagnostic and statistical criteria, as well as treatment approaches and related issue. TMSBSeffective Autumn 2008. TAG Approved OSS017 effective Autumn 2005.

Pre-reqs:

PSY121

Business/ Entrepreneurial

Business Mgt/Entrep

MGT227 OPERATIONS MANAGEMENT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course examines the concepts for designing, planning and improving manufacturing and service organizations. It covers many of the computational techniques applied to problems of efficiently converting inputs into outputs. The areas covered include: project management, forecasting, capacity planning, work measurement, quality and statistical quality control, supply chain, plant location, layout scheduling, materials management and maintenance. Upon completion , students should be able to demonstrate an understanding of operations management principles.

Pre-reqs:

MGT121

Health and Human Services

Massage Therapy

Health and Human Services

Massage Therapy

MAS229 CLINIC OPERATIONS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course permits the student to apply learned skills to the clinical setting. Students will perform intake and assessment of clients based on subjective and objective information and physical assessment determining indications and contraindications for application of massage therapy. Students will design and implement treatment plans and document treatments in SOAP notes. Students will learn the skills necessary to manage a professional practice. Examination of the therapeutic relationship between the massage professional and the client will also be covered.

Pre-reqs:

MAS225

Medical Assisting

MAT221 MED LAB PROC FOR MED ASSTG

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Introduction to basic medical laboratory techniques used in the physician's office with emphasis on quality assurance in all aspects of lab procedures. Laboratory safety and proper use of laboratory instruments is stressed. Our lab is run in compliance with OSHA/CLIA standards. Lab tests taught represent all departments of a clinical lab and includes spirometry. Pathophysiology is presented as related to procedures. CTAG CTMAT009 & CTMAT010 approved Spring 2012.

Pre-reqs:

MAT122

MAT229 OPHTHALMOLOGY II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Focuses on visual field testing; ocular motility; contact lenses, including insertion and removal instruction, care of, advantages and disadvantages of soft and rigid contacts; instrument maintenance and calibration; glaucoma and tonometry, including medical, surgical and laser treatment methods; and clinical optics. Forty hours of clinical externship are required in the ophthalmology office to apply ophthalmology skills, to receive credit for the ophthalmology course, and to receive a certificate of completion.

Pre-reqs:

MAT228

Engineering Tech

Engineering

Engineering Tech

Engineering

MET228 MACHINE DESIGN

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Descriptive, dimensional, and kinematic analysis of machine components including bearings, shafts, couplings, cam, brakes, gear drives, belt and chain drives, and clutches are the focus of this course. Laboratory work includes problem solving in the design of machine components with spreadsheet analysis when necessary.

Pre-reqs:

MET124

Business/ Entrepreneurial

Business Mgt/Entrep

MGT223 BUSINESS DECISION MAKING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course utilizes a multitude of managerial business decision making skills that culminates your business management classroom experience. It involves an actual competitive team-based decision making computer simulation. The course includes in-depth analysis and research into production, inventory, finance, research and development, pricing, product placement, and industry competitiveness decisions. The course requires teamwork and an understanding of all the areas of business decision making to successfully manage a corporation. Upon completion of this course a student should have a greater understanding of the impact of teamwork, functional department interactiveness, and competitive market analysis on everyday business decisions.

Pre-reqs:

ACC133

MGT232 INTERNATIONAL BUSINESS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on the economic, social and cultural considerations of doing business overseas. The globalization of markets and the growth of overseas business ventures is explored. The need to develop varied techniques for managing people from other cultural backgrounds, the means of minimizing risks in financial transactions, and development of systems for coordinating and controlling operations will be stressed. Techniques to overcome international business barriers are covered. Upon completion, students should be able to demonstrate an understanding of the economic, social and cultural considerations of doing business worldwide.

Pre-reqs:

BUS121

Business/ Entrepreneurial

Business Mgt/Entrep

MKT233 MARKET RESEARCH

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides knowledge and application to the Market Research method and practices to be successful in today's business arena. It includes the study of the role of marketing research, research design, data collection skills, communication research results and the management of marketing research. Upon completion, students should be able to demonstrate an understanding and practical application of field of marketing research.

Pre-reqs:

And ACC127

MKT234 PRINCIPLES OF TRANSPORTATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide a thorough presentation of how transportation relates to logistics management and supply chain management. It will include an exposure to management initiatives and control techniques in transportation. The student will leave the course with a broad and general exposure to transportation and the management of transportation from both the carrier and shipper perspectives.

Pre-reqs:

MKT226

Information Tech

Computer Security

IMT240 ADVANCED 3D GRAPHIC MODELING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides the student with opportunities to learn and refine the 3D modeling, texturing, lighting, and rendering skills learned in earlier courses. Upon completion, the student will be able to effectively use the 3D software to interface to create and render various 3D graphic objects and characters.

Pre-reqs:

IMT125

Information Tech

Computer Security

IMT242 LIGHTING AND CINEMATOGRAPHY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the topics necessary to design videos from script to screen. Studio practice will reinforce topics such as exposure, composition, framing, and single camera production. Lighting topics include studio and field lighting techniques, artistic and functional lighting design and applications. Upon completion, the student will be able to plan, shoot, and edit short form videos in a variety of genres.

Pre-reqs:

IMT223

IMT245 GRAPHIC ARTS DESIGN II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course expands on the skills and techniques learned in Graphic Arts Design. Additionally, there will be more focus on photographic enhancements; working with filters and other tools and options available to enhance graphics in this course. Upon completion of this course, students will develop further understanding and abilities to design and enhance both print and web media. Demonstrations and hands-on projects are implemented on the computer using Adobe Photoshop.

Pre-reqs:

IMT122

IMT247 MUSIC THEORY COMPOSITION II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A continuation of the first course that provides the student with advanced composition, theory, harmony and improvisational skills with the focus of implementation being TV, film and mixed media.

Pre-reqs:

IMT135

Information Tech

Computer Security

IMT250 MUSIC TECHNOLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Building on the understanding of audio recording developed in IMT129, Music Technology emphasizes commercial music production with advanced discussions and implementation of mixers, digital recording devices, duplicators and software in a lab-based environment. Upon completion, the student will be able to analyze music production needs and create simple, viable presentations of their own projects.

Pre-reqs:

IMT129

Engineering Tech

Engineering/Applied

MST226 TUNGSTEN INERT GAS WELD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Study of standard and programmable TIG welding equipment: welding of various metals such as aluminum, stainless steel, copper, and mild steel with considerations given to variables such as shielding gas types and sizes, and types of tungsten electrodes.

Pre-reqs:

And MST127

Health and Human Services

Occupational Therapy

OTA124 PSYCHOSOCIAL CLINICAL EX

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 2 Other Hours: 1

Skill development in group processes and didactic interactions. Supervised work experience and interactions with persons who have psychological dysfunctions.

Pre-reqs:

OTA121

Health and Human Services

Occupational Therapy

OTA227 CLINICAL APPLICATIONS I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Supervised field work placement designed to provide in-depth experience in and responsibility for delivery of services to patients/clients. Emphasizes the application of academically-acquired knowledge leading to the performance level expected of an entry-level occupational therapy assistant.

Pre-reqs:

OTA224

Information Tech

Computer Science

EET261 ADVCD NETWKG AND SECURTY TPC

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Session hijacking, trojans, virii, input validation and other types of attacks are covered in this class. Ghost Mail, NetCat and war dialers will be used as tools to provide counter measures against the computer criminal.

Pre-reqs:

And ECA130

Engineering Tech

Engineering/Applied

EST134 PROGRAMMABLE CONTROLLER FNDMTL

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

A study of programmable controllers emphasizing program development, logic development and troubleshooting. Emphasis on relays, timers, counters, integer math and scan-dependent programming. Factory floor control concepts are stressed.

Pre-reqs:

EST133

Information Tech

Computer Security

Information Tech

Computer Security

IMT223 DIGITAL VIDEO RECORDING & EDIT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the production of digital video. Studio practice will include topics such as camera operation, lighting, and digital video editing. Working independently and in groups, students work on projects including documentary, short subject narratives, and editing exercises. TAG approved Summer 2012 OCM008.

Pre-reqs:

IMT121

Business/ Entrepreneurial

Automotive

AUT224 AUTO DIESEL SYSTEMS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Covered by lecture and practical demonstration is the theory of operation of automotive diesel engines and auxiliary equipment such as fuel injection pumps, filtration systems, glow plugs and controllers, and diesel emission control systems. The emphasis in this course is placed on the operation and servicing of fuel delivery equipment as fitted to many domestic automotive diesels. Reference will be made to other types of fuel systems where relevant to the course material. Student learning is reinforced by laboratory exercises emphasizing the correct application of diagnostic procedures and servicing methods.

Pre-reqs:

AUT121

Sciences

Biology

BIO122 ANATOMY AND PHYSIOLOGY II

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This is the second course of a two-semester anatomy and physiology sequence, focusing on the influences of the autonomic nervous and endocrine systems upon the cardiovascular, lymphatic, respiratory, renal, digestive and reproductive systems. Introductory immunology, fluid/electrolyte, and acid-base balance concepts are included. The laboratory portion includes continued study of the human cadaver and preserved mammalian organs, additional interactive computer simulations of physiological processes, conduction of wet labs, and presentation of case studies which allow the student to compare and contrast normal physiologic mechanisms with basic pathophysiology.

Pre-reqs:

BIO121

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

BUS223 INTERNATIONAL ECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers the economic analysis of international trade and foreign investment, including theories of international trade, balance of payments, exchange rates and international monetary arrangements, adjustments of payments disequilibrium, and government policies on trade and aid. Upon completion, students should be able to demonstrate an understanding of the international economic environment.

Pre-reqs:

And BUS222

Engineering Tech

Engineering

CET234 A/E CAD

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Building on the concepts learned in Basic AutoCAD, this course is designed to explore the production of architectural working drawings using software designed specifically for the architectural/engineering disciplines. Students will produce a variety of architectural working drawings on the computer-aided drafting system.

Pre-reqs:

CET121

DET131 PRO/ENGINEER

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This three-dimensional drawing uses Parametric Technology Corporation Pro/ENGINEER software and covers the basic through advanced commands. The basics focus on practical applications of design to develop parametric solid model representations of parts and assemblies. Advanced design features include the use of skeletons, advanced sketching, geometry, patterns, surface options, dimensions, bill of materials, and features, and plotting.

Pre-reqs:

DET121

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY224 PERIODONTICS II

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The fundamentals of periodontics are reinforced and clinical assessment, disease classification, and treatment options are discussed using clinical case applications. Surgical procedures are observed through a required field observation experience. Current advances in periodontal research and therapy is presented including oral-systemic connections.

Pre-reqs:

DHY124

Information Tech

Computer Security

IMT237 COMPOSITING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn how to create special effects using the green screen, mattes, alpha channels and masks, using special effects software. Upon completion, students will be able to effectively create special effects in various formats. Students will gain these skills through a series of labs and projects utilizing Adobe After Effects.

Pre-reqs:

Or IMT125

Sciences

Chemistry

CHM141B GENERAL CHEMISTRY I B

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A broad overview of chemical principles. Topics include thermochemistry, reactivity, organic compounds, chemical periodicity and nuclear chemistry. TMNS approved Spring 2012.

Pre-reqs:

CHM141A

Sciences

Chemistry

CHM141A GENERAL CHEMISTRY I A

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

A broad overview of chemical principles. Topics include significant figures, atomic structure, chemical bonding and molecular structure of inorganic compounds and stoichiometry. TMNS approved Spring 2012.

Pre-reqs:

CHM101

Engineering Tech

Engineering/Applied

AIT134 PREDICTIVE MAINTENANCE TECH I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to familiarize the student with predictive maintenance technologies in the area of using oil, thermography, vibration, and ultrasonic analyses.

Pre-reqs:

And MST125

Sciences

Chemistry

CHM142 GENERAL CHEMISTRY II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

A broad overview of chemical principles and reactivity. Topics include biochemistry, thermodynamics, chemical equilibrium, acid- based theories, solubility, electrochemistry, and chemical and biochemical kinetics. This course is Ohio TAG approved. OSC024 sequence & OSC009 Effective Summer 2008.Ohio Transfer Module Approved Spring 2012 TMNS.

Pre-reqs:

CHM141

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

MGT222 SMALL BUSINESS MGT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on launching and operating a small business. Developing a business plan is an integral part of the coursework. Upon completion of the course, students will have an understanding of the multitude of issues involved in owning a small business and how to develop and utilize a business plan in a small business.

Pre-reqs:

ACC133

Health and Human Services

Medical Assisting

MAT124 MEDICAL LAW AND ETHICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will focus on developing an understanding of ethics and various points of view on current ethical issues. Students will learn and discuss how legal issues are applied to the medical office.

Pre-reqs:

MAT121

Educ/ Liberal Arts/ Math

English

ENG237 AMERICAN LIT:1865 TO PRESENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course surveys American Literature from the mid- to late-nineteenth century to the present. Students will read, discuss, analyze, and write about works by American authors in their historical and cultural contexts. Emphasis will be placed on critical reading of the works and techniques used to analyze them. THAH approved Spring 2012. TAG approved Summer 2012 OAH054.

Pre-reqs:

ENG124

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

IRT231 JUDICIAL PROCEDURES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Introduction to the responsibilities of the judicial reporter in the court system and the freelance environment; legal procedures; reporting techniques; and realtime reporting. Instruction in transcript production; court and transcript forms; researching for transcript production; marking and maintaining exhibits; realtime reporting in a deposition and court environment; the profession and related job opportunities; ethics, including the distribution of the NCRA Code of Professional Ethics; and professional associations. Upon completion, students should be able to demonstrate knowledge in all areas of the responsibilities of the judicial reporter.

Pre-reqs:

And IRT229

Engineering Tech

General Engineering

CET238 TECH PROJECT-CIVIL ENGINEERING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will apply knowledge acquired from technical courses to work in an interdisciplinary team and complete a comprehensive Civil-Surveying projects. (Bridge-Roadway projects, Construction staking-Superstructure design, Volume calculations-Retaining Wall design) The scope will include research, calculations, CAD drafting, mapping, a report and presentation.

Pre-reqs:

CET223

Information Tech

Computer Security

IMT230 WEBCASTING AND MUSIC PUBLISHNG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The goal of this course is for students to learn how market their music as widely and effectively as possible. The course covers the pros and cons of various file formats and how to create professional-quality files for distribution. The course also seeks to further the students' understanding of the details of music as a business. Aspects covered include preparing media for the web, distribution and synchronizing rights, licensing and copyright, and publishing in the internet age.

Pre-reqs:

IMT129

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC239 ESTATE AND INCOME TAX PLANNING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course studies income tax planning, fundamentals of estate planning, estate planning considerations and constraints, and tools and techniques for estate planning. Topics include: the estate planning process, forms of property ownership, property transfers, characteristics of wills, intestacy, the fundamentals of estate and gift taxes (including determining the gross estate), the probate process, the use of trusts and estate liquidity. Upon successful completion of this course, the student should understand the fundamentals of the estate planning process.

Pre-reqs:

ACC124

Engineering Tech

Engineering/Applied

AIT222 PREDICTIVE MAINTENANCE TECH II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 1 Other Hours: 0

This course is designed to expand a student's knowledge of predictive maintenance technologies in the areas of oil, thermography, and vibration analyses. The students will then go on to discuss the Root Cause Failure Analysis and how to implement an effective predictive maintenance program.

Pre-reqs:

AIT134

Educ/ Liberal Arts/ Math

Mathematics

MTH135B PRECALCULUS B

Credit Hours: 2.5 Contact Hours: 2.5 Lecture Hours: 2.5 Lab Hours: 0 Other Hours: 0

The student of angles and their measure; right angle trigonometry; trigonometric functions of any angle; graphs of trigonometric ratios; inverse trigonometric functions; trigonometric identities and equations, sum, difference, double angle, half angles; applications of trigonometric functions; systems of equations; matrices and determinants.

Pre-reqs:

MTH135A

Information Tech

Computer Science

Information Tech

Computer Science

WDD224 ACTIVE SERVER PAGE DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on server side programming with ASP.Net. Students learn to connect to a database, add, update, and delete from the database, create user controls, master pages, XML driven site navigation and login pages. ASP.Net web controls are emphasized. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or WDD121

WDD222 ADVD CASCADING STYLE SHEETS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on developing web pages with the latest design and development techniques such as web pages created entirely using a CSS layout. Usability is emphasized as well as web site documentation. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or WDD121

WDD226 WEB DEV WITH PHP AND MYSQL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn to develop server side scripts with PHP including developing various web applications and connecting to a MySQL database. Additional topics include the development and design of the MySQL database. Upon completion, students will be capable of utilizing PHP to develop web applications and connect to a MySQL database. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or WDD121

Information Tech

Computer Science

GIS234 GEOSPATIAL TECH IN INDUSTRY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course emphasizes learning of real-world applications using spatial tools and processes. With an identified geographically-related problem or situation, students will utilize tools and functions in order to conduct geospatial analysis to solve the problem and illustrate the situation with different tools such as GIS and remote sensing. Each lesson in this course will utilize skills learned in previous coursework and given the ability to apply these tools in differing disciplines of geospatial technologies, such as homeland security, emergency management, land planning, economic development, and business management.

Pre-reqs:

GIS233

Health and Human Services

Physical Therapy

PTA224 PTA PROCEDURES II ORTHO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected orthopedic, integumentary, rheumatological and cardiovascular conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

PTA124

Business/ Entrepreneurial

Automotive

AUT123 ENG DIAGNOSIS AND MAJ SERV

Credit Hours: 4 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This course is designed to give the student knowledge of the procedures used for automobile engine and systems diagnosis and overhaul. During the diagnosis portion of this course, students will learn how to use diagnostic test equipment. Covered also will be customer questioning techniques and information gathering procedures. During the laboratory portion of the course, the student will gain hands-on experience in engine disassembly procedures, failure diagnosis, component inspection, machining processes, measuring, fitting, and reassembly techniques.

Pre-reqs:

AUT121 Can be Taken Concurrently

Engineering Tech

Engineering

Engineering Tech

Engineering

CET235 CONSTRUCT MGT/JOB COST AND SAF

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the progression of a building project from its inception to completion along with the administration of it in the office and in the field. Contract law and the legal implications of documents will be discussed. The student will also be familiarized with specifications, shop drawings and computerized project control software.

Pre-reqs:

Or ITD122

Information Tech

Administrative Srv Off Applion

IRT130 SPEED BUILDING II

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

Designed to increase speed, endurance and accuracy for reporting of multi-voice testimony, jury charge, legal and technical material. A machine speed of 175 wpm is the goal. Emphasis on development of vocabulary, grammar, punctuation, note reading and realtime writing skills. Instruction will include the use of electronic media and/or realtime technology with teacher interaction. The course is designed for self-paced modular instruction and will incorporate the use of Web-enhanced instruction. Upon completion of each module, students should progress to the next module/speed throughout the program.

Pre-reqs:

IRT129

Engineering Tech

Engineering/Applied

HVC228 HVAC SYS AIRFLOW DUCT SIZING

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

A detailed examination of air and its properties and HVAC system airflow principles along with duct sizing are presented. As a final project, a properly sized duct system is designed given equipment performance data.

Pre-reqs:

MTH101

Information Tech

Computer Security

Information Tech

Computer Security

NET246 MICROSOFT NETWORKING III

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course covers configuring advanced Microsoft server services. Students will master skills necessary to administer an infrastructure in an enterprise environment. Topics include implementing advanced network services, advanced file services, dynamic access control, network load balancing, failover clustering, and disaster recovery.

Pre-reqs:

Or ECA244

CFS286 UNIX/LINUX FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers typical methods of collecting, examining, and recovering data from typical UNIX style file systems. Methods for imaging and mounting file systems without changing data will be studied. Ways of monitoring system events and tracking intruders.

Pre-reqs:

Or ECA277

Engineering Tech

Engineering

CET226 ESTIMATING

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course develops the methods and procedures for preparing construction estimates, both manually and electronically. Topics include excavation, masonry, concrete, steel and carpentry. Emphasis is placed on take-off procedures and pricing, consideration of labor and equipment costs, and overhead and profit. Computer programs will be utilized to establish a construction schedule. The student will do a complete estimate of a building project and prepare a competitive bid for the job.

Pre-reqs:

And ECA122

And CET122

Engineering Tech

Engineering

MET226 TECH PROJECT-MECHANICAL

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Students will apply knowledge acquired from technical courses and practical work experience to work independently and complete a technical task. A project is chosen by the student and proposed for approval by the instructor. Topics may be chosen from any area of mechanical, electro-mechanical, design, manufacturing, testing, quality assurance, etc. The scope of the project could include a literature survey, schematics, research analysis, design, fabrication, assembly and testing to create a new or optimize a current design or system. The project will entail students working in teams with elements of both design and mechanical engineering technology.

Pre-reqs:

Or DET131

Information Tech

Computer Security

IMT227 3D GRAPHICS ANIMATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn to create and render animations in a 3D development envrionment while exploring basic concepts such as Basic Keyframing, Curve Editors, and Object Hierarchy. Upon completion, the student will understand more advanced techniques such as the use of Constraints/Controllers, Bones Systems, and Facial Animation.

Pre-reqs:

And IMT125

Computer Science

CSE223 IOS DEVELOPMENT 2

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers advanced Apple iOS development topics. Best practices will be discussed along with other in-depth iOS programming concepts. Upon completion of this course, students will demonstrate the ability to create advanced iOS applications and the ability to package the applications for deployment in the Apple App Store.

Pre-reqs:

CSE222

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT239 LEGAL TRANSCRIPTION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to prepare students to perform legal transcription in a law office or other legal settings. Classroom instruction will be provided in the different areas of law, the judicial system and legal terminology. Provide students with the knowledge, terminology and background needed to prepare legal documents. Upon completion, students should be able to proficiently transcribe and format a variety of legal documents.

Pre-reqs:

Or AOT129 Can be Taken Concurrently

Business/ Entrepreneurial

Business Mgt/Entrep

FAS122 HISTORY OF FASHION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course uses a visual history of fashion from ancient times to the present with particular emphasis on recent history to present a thorough overview of Western dress. Students analyze historical periods and the influence of these periods on contemporary fashion. Students will understand how clothing symbolizes roles and social position emphasizing the ways clothing communicates values and attitudes. Also discussed is how costume reflects trends in technology, music, literature and art.

Pre-reqs:

FAS121

Educ/ Liberal Arts/ Math

Mathematics

MTH225 ANALYTIC GEO & CALC III

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course will examine calculus in three or more dimensions. Some topics covered are differentiation and integration of functions of multiple variables, double and triple integrals; vector-valued functions; graphs of multivariate functions; partial and directional derivatives. Students will find equations of tangent planes and normal lines to a surface. They will apply the chain rule to functions of several variables and solve optimization problems by analysis of critical points including extrema and saddle points. Students will also study line and surface integrals, conservative and inverse square fields, and vector fields. Green's Theorem, Gauss's Divergence Theorem, and Stokes Theorem will be introduced.

Pre-reqs:

MTH224

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT227 ADMIN PROCEDURES AND SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Emphasis will be placed on an administrative office setting. Areas covered include keyboarding and composing of various office correspondences, processing mail, dealing with visitors, maintaining an office calendar, and making travel arrangements. Office problems, practices, and procedures are also emphasized

Pre-reqs:

And ITD122

Health and Human Services

Health Information

HIT229 HLTH INFO SYSTEMS AND TECH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Use of information technology in healthcare; computer concepts, communication and network technology; data quality and databases; data security; planning, evaluation and selection of information systems; HIM specialty systems, healthcare information systems; emerging technologies; emphasis on the electronic health record.

Pre-reqs:

HIT224

Sciences

Physics

PHY121A COL PHYSICS IA W ALG

Credit Hours: 2 Contact Hours: 2.5 Lecture Hours: 1.5 Lab Hours: 1 Other Hours: 0

Study of motion and force. Problem-solving in orientation, emphasizing the application of formulas, algebra, and trigonometry to physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TMNS approved Spring 2012.

Pre-reqs:

MTH135

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC124 INDIVIDUAL TAXATION

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course examines principles of taxation for individuals, including computation of income and deductions, both personal and for the taxpayer's businesses and income-producing properties. In addition, cost recovery, gains and losses, tax credits, and the overall classifications and filing statuses are discussed. Students will prepare a comprehensive tax case on IRS tax forms to gain practical knowledge. Upon completion of the course, the student should be able to analyze complex tax scenarios and determine their impact on an individual's tax liability.

Pre-reqs:

ACC132 Can be Taken Concurrently

Health and Human Services

Physical Therapy

PTA223 PTA PROCEDURES III

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course will present to the students the impairments, disabilities, functional limitations, and interventions of selected neuromuscular disorders and will include, but not limited to spinal cord injuries, traumatic brain injuries, strokes, and developmental disabilities. Laboratory activities, written assignments, and competencies are required components of this course. Students will perform selected therapeutic interventions under direct PT/PTA supervision as part of the laboratory component of this course.

Pre-reqs:

PTA224

PTA229 DIRECTED PRACTICE I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Clinical experience in various physical therapy departments under direct supervision. Grading: Credit/Fail

Pre-reqs:

PTA124

Health and Human Services

Physical Therapy

PTA230 SEMINAR II

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Presentation of diverse clinical issues and approaches to patient management.

Pre-reqs:

And PTA225

PTA229 DIRECTED PRACTICE I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Clinical experience in various physical therapy departments under direct supervision. Grading: Credit/Fail

Pre-reqs:

And PTA125

PTA228 SEMINAR I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Presentation of topics related to clinical practice to include ethics and professional development.

Pre-reqs:

And PTA224	Can be Taken Concurrently
And PTA225	Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM228 NONVERBAL COMMUNICATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to important nonverbal concepts, theories, and typologies. Students will learn to interpret and manage nonverbal communication behaviors as they relate to interpersonal relationships in both personal and professional contexts. The course also provides students with an opportunity to analyze and interpret nonverbal elements of mediated communication messages.

Pre-reqs:

IDS102

Or Test & Score: Compass Reading - 080

Or Test & Score: ACT Reading - 18

Information Tech

Computer Science

CIS121 HELP DESK AND COMP SUP CONCEPT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides the student with essential topics covering help desk operations, roles and responsibilities of the analysts, help desk processes and procedures, tools and technologies, performance measures, and the help desk setting itself. There are numerous hands-on projects to practice implementing help desk concepts in a real world situation. Upon completion, students will have a skills to explore in greater detail various helpdesk tools, situations, and user conflicts and resolution.

Pre-reqs:

Or Test & Score: Compass Reading - 080

CSE122 PROGRAMMING LOGIC & PROB SOLV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with structured programming principles through awareness and application of structured programming and object-oriented concepts and techniques. Upon course completion, the student should have an understanding of how to develop the logic to solve a programming solution using structured flowcharts and psuedocode.

Pre-reqs:

IDS102

Information Tech

Computer Science

CSE229 VISUAL BASIC DEVELOPMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses designing, developing, testing, and deploying desktop software applications using the Microsoft Visual Basic.Net programming language. This course will help prepare the student for MCTS certification in Microsoft Visual Basic.Net. Upon completion of this course, the student should be able to develop a desktop application with a graphical user interface, write code using Visual Basic control structures, properly validate user input, and test and debug the application.

Pre-reqs:

ECA127

CSE231 JAVA PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to the Java programming language. The course will cover the fundamentals of Java such as Java data types, control structures, classes, methods, and arrays. Upon successful completion of this course, students will learn how to create and execute Java programs.

Pre-reqs:

ECA127

CSE227 WINDOWS PROGRAMMING WITH C#

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course the student will learn to design, create, test, deploy, maintain and support desktop software applications using Microsoft's C#.Net. The student will complete a series of hands-on lab exercises using C#. This class will help prepare the student Microsoft's MCTS certification exam. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or CSE122

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

IRT240 SHORT WRITING TECHNIQUES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Using an NCRA approved realtime theory, students will focus on shortening their writing techniques in order to build up to graduation speeds. Students will learn and review short writing techniques through lecture, text, and dictation. The instructor will reinforce short writing skills for the judicial and broadcast captioning fields through the use of text, reading and writing lessons, translating, testing, and dictation. Upon completion, students should be able to successfully use short writing techniques without hesitation for the judicial and captioning field.

Pre-reqs:

IRT122

Computer Security

IMT239 MUSIC SYNTHESIS I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The focus of this course is to provide students with the opportunity to develop portfolio level work in the multifaceted areas of music synthesis. The course will provide both a theoretical and practical knowledge of music synthesis. The practical knowledge will be attained by completion of various projects which encompass all the core functions of music synthesis professionals.

Pre-reqs:

And IMT129

Business/ Entrepreneurial

Accounting/Finance

FIN224 RISK MANAGEMENT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is designed to provide the students with a clear understanding and insight of insurance programs available to individuals, families and organizations as a safeguard against financial liabilities in case of accidents, prolonged illness and for losses due to natural catastrophes and disasters. Upon completion, students should be able to select the most appropriate insurance program for themselves and their families.

Pre-reqs:

ACC132

Information Tech

Computer Science

Information Tech

Computer Science

CPD223 ORACLE DTBASE: ARCH AND ADM

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Introduction to Oracle Administration and Management is a course designed to provide students with an in-depth understanding of the basic features of Oracle including object-orientation, partitioning and advanced Oracle features for the Internet. The goal in this course is to cover the Oracle architecture and internal mechanisms such that the student is able to perform basic DBA tasks such as database creations, startup and shutdown, and database management. The course also covers Oracle networking basics and the Oracle utility programs. Hands-on exercises are used to demonstrate each feature and the student will gain first-hand experience in the key Oracle DBA concepts.

Pre-reqs:

Or CPD122

SGE121 GAME DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Categories of video games, design principles related to different processing platforms, current animation techniques, and current software packages available for creation of video games are all major topics. The focus of this course is to familiarize the student with design technologies and software available to implement animation used for video games. The student will gain an overall view of the gaming industry.

Pre-reqs:

Or Test & Score: Compass Reading - 066

SGE221 ADV GAMING AND SIMULATN TOPICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course explores topics in the area of 2D and 3D game programming. The students will develop a variety of software projects related to the gaming and simulation areas.

Pre-reqs:

Or CSE234

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

ITD106 Computer Applications - Access

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the use, styles and features of database application programs. Upon completion, students should be able to utilize MS Access as a basic business tool.

Pre-reqs:

ITD100

Health and Human Services

Nursing

NUR223 NUR CARE PERSON/ALT III

Credit Hours: 8 Contact Hours: 14 Lecture Hours: 3 Lab Hours: 11 Other Hours: 0

This course continues to develop the knowledge base necessary for nursing practice. Initially, the course focuses on the nursing care of clients with more complex and acute health problems. Emergency nursing principles are introduced. Management concepts, the organization as a system and the nurse as a manager of client care are subsequently addressed. Application of these concepts is facilitated through a preceptorship. This directed nursing practice will assist in role transition from student to beginning associate degree nurse.

Pre-reqs:

And BIO221

Business/ Entrepreneurial

Business Mgt/Entrep

BUS122 BASIC ECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A survey course designed to introduce students to basic economic concepts and principles of modern micro- and macro-economics. Major topic areas will include supply and demand, price system, market economies, monetary and fiscal policy and global economic issues. Upon completion, students should be able to demonstrate an understanding of the above topic areas. TMSBS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Or Test & Score: ACT Reading - 18

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

FIN123 FUND FINANCIAL SERVICES

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces the student to the discipline of personal financial planning and to the various services which support the planning process. The tools and techniques of those services are addressed from two perspectives: (1) a professional occupation and (2) individuals developing and implementing their own long-range financial plan. Specific topics include understanding the financial planning process, ethical and professional considerations in financial services, and introductions to the fundamentals of credit, insurance, investments, and retirement and estate planning. Upon successful completion of this course, the student should understand the fundamental concepts of personal financial planning.

Pre-reqs:

Or BUS124

Educ/ Liberal Arts/ Math

Social Sciences

PSY222 Psy Aspect of Therapy

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Covers the general principles of interaction with a specific focus on those unique challenges confronting the patient and the health care provider. Attention is given to the psychosocial needs of both the patient and the health care provider. Issues of communication, patient-provider relationships, patient dependency, personal values, and relating to people from differing cultures, ages, and special needs are discussed.

Pre-reqs:

Or IDS102

Sciences

Biology

BIO101A INTRO TO ANAT AND PHYSIO A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 1.5 Lab Hours: 0 Other Hours: 0

Introduction to Anatomy and Physiology provides an understanding of human structure and function of all body systems. Focus will be given to beginning chemistry principles, cells, and tissues. Module one covers chemistry and the following body systems (Integumentary, Musculoskeletal and Nervous control system). This course is for the student who has little or no background in human anatomy and physiology.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Information Tech

Computer Security

Information Tech

Computer Security

NET244 MICROSOFT NETWORKING I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course covers installing and configuring a Microsoft server operating system. Students will demonstrate skills necessary to implement a core infrastructure into an existing enterprise environment. Topics include working with Active Directory, implementing local storage, implementing file and print services, and implementing server virtualization with Hyper-V.

Pre-reqs:

And NET121

NET131 MICROSOFT CLIENT OPERATNG SYS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course includes installing and administering the Windows Operating Systems. It also covers security issues, installation troubleshooting, desktop issues, and desktop configuration.

Pre-reqs:

And NET121

NET244 MICROSOFT NETWORKING I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course covers installing and configuring a Microsoft server operating system. Students will demonstrate skills necessary to implement a core infrastructure into an existing enterprise environment. Topics include working with Active Directory, implementing local storage, implementing file and print services, and implementing server virtualization with Hyper-V.

Pre-reqs:

Or ECA144

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

BUS222 MACROECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An in-depth study of macro-economic concepts and principles such as market supply and demand, unemployment and inflation, monetary and fiscal policy, national income accounting and Classical and Keynesian models. Upon completion, students should be able to apply and demonstrate an understanding of the above topics relative to today's economy. TAG approved course- OSS005 effective Fall 2005. TMSBS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Health and Human Services

Human Services

CDC121 CHEM DEP:ASSESSMT AND TRTMT PL

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides specific content in orientation, screening, intake, assessment, treatment planning, and counseling with adults and adolescents with substance abuse/dependency disorders. Topics include: culturally sensitive practices in interviewing and assessment, diagnosis of substance abuse/dependency disorders, diverse models of treatment, case management, crisis intervention, and referral to appropriate levels of care. Other topics include discharge planning, relapse prevention, confidentiality, and roles of mutual self-help groups.

Pre-reqs:

SWK125

CDC122 FUND OF CHEM DEP PRACT I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides students with an understanding of theories and practices in the field of chemical dependency. Students learn to integrate theories with practical application to serve persons with abuse and dependency diagnoses. They develop knowledge of the different frameworks for viewing chemical dependency and determine the models that develop from the frameworks and effective use of the models. They continue to develop knowledge of how different drugs impact individuals. Students learn to document interventions and outcomes.

Pre-reqs:

SWK125

Health and Human Services

Human Services

SWK130 METHODS IN PRACTICE II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on the assessment and documentation processes practiced in a diverse range of human and social services settings. Students will apply the theory and practice skills from Methods I through exercises using focused and group interviewing skills. Students will apply documentation skills using traditional written case notes and computer based formats.

Pre-reqs:

SWK124

SWK224 POVERTY IN THE US

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An examination of the historical, social, cultural, organizational and political factors related to poverty in the U.S. and their impact on social service programs. Social and personal dimensions of life and poverty in urban and rural areas will be explored.

Pre-reqs:

SWK121

Educ/ Liberal Arts/ Math

Criminal Justice

CJS222 CRIMINAL LAW IN THE US

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines criminal law in the U.S. Topics include the structure and functions of the legal system, the historical development of the criminal law, and elements of major crimes and defenses.

Pre-reqs:

CJS121

Educ/ Liberal Arts/ Math

Criminal Justice

CJS227 CRIMINAL JUSTICE PRACT AND SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 14 Other Hours: 0

The Practicum component of this course is an individual placement in a selected criminal justice agency for an educationally supervised learning experience. Students will complete 210 hours at the placement site. The Seminar component of this course is taught concurrently with the student's practical internship experience. The course will emphasize the integration of the practical learning experience with the student's academic coursework in criminal justice.

Pre-reqs:

CJS221

Health and Human Services

Medical Lab

MLT225 MLT APPLICATIONS

Credit Hours: 3 Contact Hours: 9 Lecture Hours: 0 Lab Hours: 9 Other Hours: 0

Under supervision of MLT Program faculty, the student has the opportunity to practice the manual procedures from the previous MLT courses. In preparation for the affiliated hospital experience, the student will organize his/her daily workload to maximize productivity and attain competence in the manual methods. Emphasis is placed on manual hematology, normal and abnormal blood smears, routine urinalysis, body fluid cell counts and cytospins, routine serology, blood banking using tube and gel techniques.

Pre-reqs:

And MLT222

Engineering Tech

Engineering/Applied

HVC226 SHEET METAL LAYOUT II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Covers layout, forming and fabrication of basic sheet metal ductwork fittings and use of equipment to accomplish these tasks. Topics include: the fabrication of square/round sheet metal ductwork, tapers, transitions, and offsets; the development of geometrical elements of structures, their intersections by the radial line, and triangulation methods of sheet metal layout.

Pre-reqs:

HVC123

Information Tech

Computer Science

Information Tech

Computer Science

CSE121 MOBILE DEVELOP ARCHITECTURE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the overall methodologies of developing applications for mobile and handheld devices. The design, architecture, and techniques of mobile and handheld devices will be analyzed. Upon completion of the course, students should have an understanding of the mobile application development process.

Pre-reqs:

ECA127 Can be Taken Concurrently

CSE122A PROGRAMMNG LOGCI & PROB SOLV A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with algorithm development, variables, sequential statements, and conditional statements. Upon completion students should have an understanding of the following concepts: algorithms, variables and data types, basic sequential statements, conditional logic and how to use them in program coding.

Pre-reqs:

Or ITD100

Health and Human Services

Dental Hygiene

DAS228 DIRECTED CLINICAL PRACTICE

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course is a directive practice course, where under the supervision of a faculty dentist, expanded functions auxiliary students will provide restorative patient care as allowed by the EFDA certification. Students will be required to participate in onsite and offsite clinical rotations.

Pre-reqs:

And DAS227

Information Tech

Computer Science

Information Tech

Computer Science

WDD121 INTERNET/INTRANET DES & DEV A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, fundamentals of web design, the HTML markup language, and the CSS style sheet language will be studied. Specific topics covered include the basic HTML webpage, configuring text and color with CSS, adding images, and best practices in web design. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a basic static website.

Pre-reqs:

IDS102

Computer Security

CFS287 NETWORK FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to teach students the skills required to identify, acquire, and analyze data gathered from network devices using both passive and active tools. Emphasis will be placed on the use of open-source security tools to conduct an analysis of network activity to gather information relative to an investigation.

Pre-reqs:

And NET220

Health and Human Services

Physical Therapy

PTA221 PTA PROCEDURES I

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 3 Lab Hours: 6 Other Hours: 0

This course will present to the students a comprehensive study of pain and its management; a study of the impairments, disabilities and functional limitations associated with burns, tissue repair, and pulmonary conditions; principles of physical agents/modalities usage including rationale, effects, adverse effects, contraindications, precautions, application, and documentation. Laboratory activities, written assignments, and competencies are required components of this course. Student may perform selected therapeutic interventions with patients under direct PT/PTA supervision as part of the laboratory components of this course.

Pre-reqs:

PTA121

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

MGT235 Facility & Event Mgt for Sport

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides students with an understanding of sports facility and event management. Sports facility management consists of identifying goals of the event and coordinating people in the organizations involved to achieve those goals. Sports facility management consists of planning and designing a sports facility, staffing of management, facility marketing, developing revenue streams, facility scheduling, and general facility maintenance in order to host the sporting events.

Pre-reqs:

And ACC132

Educ/ Liberal Arts/ Math

Education

EDU223 COMMUNITY & FAM BASED PR

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An examination of community and family-based early childhood programs such as Head Start. Even Start and public special needs preschools. Adherence to mandates/guidelines, population served, socio-economic trends and factors, and how these programs differ from others are studied. Family relations and parenting skills emphasizing family involvement and empowering parents/guardians are studied and related to use in community/family programs. Five volunteer/observation hours required.This is the TAG ODE 006 course approved Spring 2012.

Pre-reqs:

EDU131

EDU224 EARLY CHILDHOOD PROG ADM

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Examines key aspects of starting and operating various types of early childhood programs. Policies/procedures, legalities, supervision, finances, planning and organizing, and personnel management are emphasized.

Pre-reqs:

EDU131

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT127 WP-MICROSOFT WORD

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, functions, and features of the Microsoft Word program. Creating, editing and storing text are emphasized. Upon completion of this course, the student should be able to produce a variety of professional-looking documents.

Pre-reqs:

Or Test & Score: Computer Test - 018

IRT229 REALTIME SOFTWARE APPLICATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Instruction in operating realtime court reporting software for the production of the legal transcript. Students are taught the process of recording verbatim testimony via a computerized steno machine; reading, translating, and editing the verbatim testimony to produce the legal transcript; file maintenance; dictionary building; EZ keys; globalizing entries. Upon completion, students should be able to demonstrate knowledge and skills in operating and utilizing the different aspects of the realtime court reporting software.

Pre-reqs:

Or IRT133

Business/ Entrepreneurial

Business Mgt/Entrep

CUL224 Beverage Management & Service

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will guide students to create and maintain bar and beverage service in a responsible and profitable manner for a food service operation. Course content will include: responsible alcohol service, needed equipment, mixology, employee management, set up, purchasing, receiving, storage and inventory control as well as categories of products such as wine, beer, and specialty drinks.

Pre-reqs:

CUL119

And CUL120

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH124A Statistics, Module A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

Or Test & Score: Compass Algebra - 054

MTH124 Statistics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

Or Test & Score: ACT Math - 22

Education

EDU227 EARLY CHLD ED TECH PRACTICUM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

A 210-hour, supervised experience working in the early childhood education/caregiving setting. Open only to Early Childhood Education Technology majors. Weekly seminar participation required.

Pre-reqs:

And EDU132

English

Educ/ Liberal Arts/ Math

English

ENG125 TECHNICAL EDITING AND LAYOUT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce students to the editing process and teach students the basic of design layout. Students will practice both hardcopy and electronic editing and proofreading, as well as study and discuss a variety of editorial approaches.

Pre-reqs:

ENG124

Education

ASL222 AMERICAN SIGN LANG PRAC/SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

ASL Practicum and Seminar is a 210 hour supervised educational experience . This course will allow students to observe and practice signing in actual situations. Students will be able to apply the skills and knowledge learned in the classroom. Students will be assigned to specific community sites and will be supervised by a staff person from the community agency. This is a capstone course.

Pre-reqs:

And ASL221 Can be Taken Concurrently

Mathematics

Mathematics

MTH092 Prealgebra II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline. Topics to be covered are positive and negative fractions; positive and negative decimals; ratios, rates and percent; solving equations and word problems.

Pre-reqs:

MTH091 Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

TOY202 Toyota Automotive Braking Sys

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This course will cover diagnosis, service and repair of the braking systems on Toyota vehicles. Upon completion of the class, students will have experience performing braking system service including: brake pad replacement, rotor resurface and replacement, caliper service and replacement, shoe replacement, drum resurface and/or replacement, parking brake cable replacement and adjustment, hose replacement, master cylinder replacement, and hydraulic control valve service and replacement. Students will also learn the knowledge and skills necessary to diagnose, service, and repair advanced anti-lock brake system faults. Students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Upon successful completion of this course students will be prepared to take ASE test A-5 (Brakes).

Pre-reqs:

TOY201

Information Tech

Computer Security

NET256 Scaling Networks

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on growing the network and using advanced routing protocols such as EIGRP and multi-area OSPF. Course topics include network design and its effects on growing networks including the need for link aggregation and DHCP, maintaining the network with IOS file management and layer-2 troubleshooting.

Pre-reqs:

NET137

Computer Science

CIS124 ITIL FOUNDATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course presents the student with the concepts necessary to be able to identify, plan, and deliver support of Information Technology services to an organization. The content targets the knowledge of the Service Lifecycle and the integration of IT and core business needs. Team activities systematically reinforce the concepts learned. Upon completion, students will be able to identify ITIL, Information Technology Infrastructure Library, and best practices utilized by major corporations.

Pre-reqs:

And ITD106

Information Tech

Computer Science

CIS125 DATA ANALYSIS AND DECISION MAK

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on key technological areas used for the analysis and transforming of data into actionable information. Students will learn advanced database and data manipulation concepts relating to the storage, retrieval, and analysis of information. Popular tools will be utilized to evaluate various data sources, define business dimensions, store transactions, produce results and transfer data. Upon successful completion of this course, students will be prepared to leverage the power of these tools to perform data analysis.

Pre-reqs:

Or ITD105

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

CIS221

CIS223 IT PROJECT MANAGEMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will be involved in the design, development, and management of various IT projects. Using these hands-on labs, students will develop a competency and professionalism in IT project management including the necessary business knowledge, interpersonal skills, and project management skills required to successfully manage IT projects. Topics in this course incorporate universal project management principles, and include important skills such as conflict resolution, negotiation, communicating, team building/leadership, and setting and managing expectations. Upon completion, students will have skills to explore the greater detail various project management tools, such as scheduler, spreadsheets, and databases. This course helps prepare students for the Comp TIA IT Project+ certification test.

Pre-reqs:

Or ITD105

Information Tech

Computer Science

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

Or CSE229

Or CSE231

Health and Human Services

Massage Therapy

MAS228 PROFESSONAL PRACTCE & EVALUATN

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Application of massage therapy skills to course instructor in order to demonstrate minimally acceptable competency followed by a comprehensive evaluation of student performance by course instructor.

Pre-reqs:

MAS122

Fire and EMS

EMS124 PARAMEDIC I CLINICAL

Credit Hours: 2 Contact Hours: 12 Lecture Hours: 0 Lab Hours: 12 Other Hours: 0

This course is a co-requisite to Paramedic I, EMS122. It consists of the clinical and infield internship component related to the course content and skills completed in lab sessions during Paramedic I. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

EMS121

Educ/ Liberal Arts/ Math

English

Educ/ Liberal Arts/ Math

English

SPN200 ELEMENTARY SPANISH II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers intermediate reading, speaking, writing, and listening skills and application of those skills.

Pre-reqs:

SPN100

Business/ Entrepreneurial

Automotive

AUT254 AUTO AFTERMKT VEH INT MOD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This class provides students with the preparatory experience required to perform vehicle interior modifications. Students will be exposed to current automotive aftermarket industry standards. Attention to detail is reinforced throughout student projects. This course concentrates on the modification of vehicle interior electrical systems, lighting systems, instrument cluster, HVAC, window controls, seating, sound systems, and visual appeal through the application of automotive aftermarket accessories and practices.

Pre-reqs:

AUT125

Educ/ Liberal Arts/ Math

Criminal Justice

CJS240 LAW ENFORCEMENT ACADEMY II

Credit Hours: 8 Contact Hours: 22 Lecture Hours: 1 Lab Hours: 21 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum. The course focuses on firearms training, patrol administration, traffic enforcement, criminal investigation, intermediate subject control techniques and physical conditioning, and human relations.

Pre-reqs:

CJS140

Information Tech

Computer Science

Information Tech

Computer Science

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

Or WDD224

Educ/ Liberal Arts/ Math

Mathematics

MTH135A PRECALCULUS A

Credit Hours: 2.5 Contact Hours: 2.5 Lecture Hours: 2.5 Lab Hours: 0 Other Hours: 0

Study of linear and quadratic equations, and their applications; solving rational and radical and radical equations; complex numbers; linear, polynomial and rational inequalities; equations and inequalities involving absolute value; graphs of equations; relations and functions; transformation of functions; combining functions and composite functions; inverse functions; exponential and logarithmic functions and equations; the conic sections; sequences and series.

Pre-reqs:

And MTH094

Education

EDU124 INFANT TODDLER CURRICULUM

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Studies theory and practice of infant toddler curriculum, including current research. Goal setting, curriculum design, lesson planning and instructional methods based on NAEYC guidelines. Five observation hours required.

Pre-reqs:

Or PSY125

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

MST134 HYDRAULIC AND PNEUMATIC SYS

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course is a combination of MST122 and MST123 and is the study of fluids, their properties, behaviors and applications. Topics include: basic hydraulic and pneumatic pumps, actuators, valves, piping, hydraulic and pneumatic applications, the various types of hydraulic and pneumatic circuits, and how to troubleshoot these circuits.

Pre-reqs:

Or Test & Score: Compass Algebra - 042

Or Test & Score: ACT Math - 20

IET270 DIM METROLOGY AND INSPECT I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an in-depth study of measuring principles, instruments, and techniques. The measuring instruments most commonly used in industry, including coordinate measuring machines, are covered. Emphasis is placed on proper use of equipment in terms of prevention and minimization.

Pre-reqs:

MTH101

Or MTH093

Health and Human Services

Respiratory Therapy/MIST

MIS223 MIS III/Directed Practice

Credit Hours: 1 Contact Hours: 5 Lecture Hours: 0 Lab Hours: 5 Other Hours: 0

This course reinforces the technical competency skills in decontamination, assembly, sterilization, distribution and storage. Students will demonstrate competency by working more independently in the central service processing area in a hospital/surgery center.

Pre-reqs:

And MIS222 Can be Taken Concurrently

Dietary Management

Health and Human Services

Dietary Management

DTR227 FOODSERVICE OPERATIONS I

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This is the first course that introduces the scientific and nutritional principles involved in food preparation including ingredient function, food composition, nutritional quality, terminology, equipment usage, preparation techniques and product evaluation. Quantity food production techniques and principles are introduced. Kitchen design and equipment selection is introduced in terms of usage with products. This course includes a lab section which includes menu costing and preparation, tools, and equipment used in quantity food preparation, 'Mise en place', basic principles of cooking, knife skills, stocks and soups, sauces, principles of all meat, poultry and fish cooking, and vegetables. Fruits, principles of bake shop, yeast breads, and plate presentation are also introduced. Students will also learn healthy cooking principles as required by the dietary guidelines, recipe and menu modification, allergies and understanding of altered textures and buffet presentation of quantity foods.

Pre-reqs:

DTR121

DTR229 PROFESSIONAL DIETETICS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Final course in the Dietetic Technician program that brings all of the issues of Dietetics together on a professional level: counseling skills, Nutrition Care Plans, team building, professionalism, ethics, management skills and current practices. Current research will be reviewed and analyzed. Review of the material for the registration examination.

Pre-reqs:

DTR228

DTR231 FOODSERVICE DIRECTED PRACTICE

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 0 Other Hours: 2

CATALOGUE DESCRIPTION: Under the supervision of a registered/licensed dietitian or other qualified preceptor, the student will complete 160 hours of directed practice in a foodservice setting, within a 16 week semester. The student will participate in all of the stations involved in foodservice in order to understand the workings of a kitchen. Preparation of all food items will be essential to this rotation. Working with the Foodservice Director, the student will apply knowledge learned from Foodservice Operations I (DTR227) and II (DTR230), as well as Dietary Systems (DTR228).

Pre-reqs:

DTR230 Can be Taken Concurrently

Health and Human Services

Dietary Management

DTR221 MEDICAL NUTRITION THERAPY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides advanced nutritional principles, including the mechanisms through which nutrients meet the human biological needs. The applications of the principles of nutrition as they relate to diet in disease with an emphasis on the effects of pathological conditions on nutritional needs are presented. The process of medical nutrition therapy is approached through the use of the 'Nutrition Care Process', as required by the Academy of Nutrition and Dietetics.

Pre-reqs:

And DTR123 Can be Taken Concurrently

DTR225 COMMUNITY NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction to the program planning, policies, resources, and nutrition issues specific to community nutrition. The student will also be provided with an understanding of creating and implementing nutrition programs for various life cycle stages.

Pre-reqs:

And DTR226 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

MTH223 ANALYTIC GEOMETRY-CAL I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of analytic geometry, limits, continuity, derivatives, tangent and normal lines, derivatives of trigonometric functions, related rates, Newton's method, Rolle's theorem, mean value theorem, extrema of functions, antiderivatives, definite integrals, indefinite integrals, areas and volumes. Key ideas and concepts will be presented from a variety of perspectives with a broad range of examples and applications. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the Trapezoidal Rule and Simpson's Rule for integration. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

Or Test & Score: ACT Math - 27

Health and Human Services

Massage Therapy

Health and Human Services

Massage Therapy

MAS227 MASSAGE THERAPY PROCEDURES

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Students will learn procedures to evaluate applicability of massage therapy to a variety of conditions, treatment of those conditions and the integrating of those skills into a medically oriented office. SOAP notes, record keeping for therapeutic applications and insurance billing will be taught. Ethical issues related to Massage Therapy will also be dicussed.

Pre-reqs:

MAS121

Physical Therapy

PTA123 KINESIOLOGY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The study of human anatomy emphasizing the biomechanics, motion and peripheral innervations of the musculoskeletal system as a basis for understanding normal and abnormal function and the development of exercise and gait programs. The fundamentals of posture, muscle physiology, muscle function, gait analysis and strength will be covered. Students will review muscle locations and actions, as well as locations and functions of selected ligaments, the intrinsic muscles of the hands and feet, and the innervations of the muscles of the extremities. Laboratory activities, cadaver studies and practicals are a required component of this course.

Pre-reqs:

And PTA221 Can be Taken Concurrently

PTA222 PTA PROCEDURES II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

This course will present to the students the impairments, disabilities, functional limitations, and interventions of selected musculoskeletal, rhematological and cardiovascular conditions including spinal disorders and amputation. Also included, will be an overview of CNS anatomy, physiology, and pathology, sensory integration, motor development and motor control. Laboratory activities, written assignments and competencies, are required components of this course. Students will perform selected therapeutic interventions with patients under direct PT/PTA supervision as part of laboratory component of this course.

Pre-reqs:

And PTA228 Can be Taken Concurrently

Occupational Therapy

Health and Human Services

Occupational Therapy

OTA221 DEVELOP ASPECTS IN OT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Identification and description of handicapping conditions existing from birth or through adulthood. Instruction in occupational therapy theories and treatment for individuals with developmental and learning impairments. Emphasis on therapeutic techniques to enhance occupational performance from birth through adulthood.

Pre-reqs:

OTA121

OTA222 DEV CLINICAL EXPERIENCE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 2 Other Hours: 1

Training of transfer techniques, range of motion, inhibition and facilitating techniques. Training in the use of self-maintenance skills and assistive devices. Supervised work experience in a school, hospital or workshop servicing clients with developmental disabilities.

Pre-reqs:

Or BIO122

Business/ Entrepreneurial

Automotive

AUT173 HONDA STEERING AND SUSPENSION

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers honda-specific diagnostic and repair techniques necessary to service Honda steering and suspension systems. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper steering and suspension system inspection and repair procedures. Hands-on practice will enable the students to apply these concepts to Honda vehicles. Special emphasis is placed on the safety aspects related to automotive steering and suspension service.

Pre-reqs:

AUT124 Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

AUT226 AUTO DRIVETRAIN 2

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course is taught in conjunction with Automotive Drivetrain I (AUT-225). The purpose of this course is to give the student a sound knowledge of the operation, diagnosis, and repair of automatic transmission and driveline systems. Included in the course is student laboratory experience in the techniques of diagnosis, disassembly and repair, reassembly and adjustment of all components used in modern automatic transmissions.

Pre-reqs:

AUT121	Can be Taken Concurrently

AUT282 CAT TRANSMISSIONS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The purpose of this course is to teach students about the purpose and operation of transmissions used in lift trucks, specifically powershift and hydrostatic. The course covers component identification, power flow, precision measurements of components, and functions of these components. The instructor will demonstrate CAT transmission diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. The course concludes with a description of routine maintenance procedures, troubleshooting guidelines, and self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121	Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

ITD122 COMPUTER APP FOR PROFESSNL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Computer Applications for Professionals describes the components and peripherals of a computer/PC and how they function and communicate as a system. Principle topics covered are the Windows operating system, Internet applications, the Windows networking environment and a variety of software application packages used to solve scientific, business, and engineering technology problems.

Pre-reqs:

Or Test & Score: Computer Class HS - 2

Or IDS120

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV226 WATER SAMPLING,ANAL,CONT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover water sampling techniques and chemical analysis of water quality. Included will be methods of measurement, techniques for sampling and required field instrumentation. Laboratory analysis, date interpretation and proper reporting methods will be developed.

Pre-reqs:

Or ENV223

ENV222 INDUST PROCES & POLUTION CNTRL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the students to environmental control systems and practical applications of their operation and maintenance. Particular attention given to piping and instrumentation diagrams, the reading of strip charts, continuous emission monitors, stack and source sampling and volumetric measurement of fluids. General troubleshooting techniques are also covered.

Pre-reqs:

Or CHM141

Sciences

Physics

PHY101 PRINCIPLES OF PHYSICS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Survey course that assumes no familiarity with physics. Space, time, matter, motion, force, momentum, mechanical energy, heat, electricity, magnetism, light, units of measure and other concepts are studied descriptively. Basic calculation and problem-solving techniques are introduced, including a brief review of elementary algebra. Laboratory work emphasizes how to read measuring instruments, proper use of measured data in calculations, and how measured data can be used to test theories of physics. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: Compass Algebra - 055

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

MGT141 INTRO TO CASINO MANAGEMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an overview of gaming operations, including the economics of the casino and casino management. As part of the broader study of gaming, students will study the history of gaming, organizationand operation of a casino, new technological advancements of gaming in the industry, the mathematics of casino games, casino management, staffing, security, controls, taxation, and entertainment.

Pre-reqs:

BUS121

Health and Human Services

Respiratory Therapy/MIST

MIS222 Medical Inst Sterilization III

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course reinforces the technical functions of the field of central service processing/medical instrument sterilization with the review of decontamination, assembly, sterilization, distribution and storage. Other topics include credentialing exam preparation and job readiness skills.

Pre-reqs:

MIS123

Educ/ Liberal Arts/ Math

English

ENG124 COLLEGE COMPOSITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course emphasizes writing based on reading response with review of essay development, grammar, and punctuation. Emphasis is on the process of drafting, revising, and editing to achieve clarity. A research project requires APA or MLA documentation. TMEC Approved effective Autumn 2008.

Pre-reqs:

Test & Score: ACT English - 18

Mathematics

Mathematics

Mathematics

Mathematics

MTH092 Prealgebra II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline. Topics to be covered are positive and negative fractions; positive and negative decimals; ratios, rates and percent; solving equations and word problems.

Pre-reqs:

Or MTH100

Information Tech

Administrative Srv Off Applion

ITD102 Computer Applications - Word

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the use, styles and features of word processing programs. Upon completion, students should be able to utilize MS Word as a basic business tool.

Pre-reqs:

Or ITD122

Sciences

Physics

PHY125 ASTRONOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This class is a study of fundamentals of astronomy. Topics include: the solar system, planets, stars, galaxies, and the universe. This course is a comprehensive survey of astronomy designed primarily for the non-science major. Pivotal discoveries discussed in class are reinforced through lab activities that replicate topic-related studies. This course should provide the student with an understanding of the nature of the universe and insight into the scientific fields that provide the evidentiary basis for modern cosmological theories.

Pre-reqs:

MTH123

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KARF999 Fine Arts Core Course

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Sciences

Biology

BST120 INTRO TO BIOTECHNOLOGY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course will introduce students to the historical and technical concepts responsible for the rapidly growing biotechnology industry. Topics include the history of biotechnology applications such as pharmaceutical research and manufacturing, advancements in agricultural productivity as well as identifying the basic techniques and instrumentation used in these applications.

Pre-reqs:

Engineering Tech

Engineering/Applied

HVC230 HVAC RESIDENTIAL EQUIP SIZING

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course provides the HVAC student with a powerful, efficient, and highly accurate method of load estimating and duct selection. The software covered in this course simplifies a very complex and time-consuming task of manually calculating the estimated load with the Right J software package. Outside classwork may be assigned.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV160 WASTEWATER TRTMT-PRELIMY TRTMT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of wastewater treatment. The topics of this course include general issues regarding the steps in preliminary treatment of wastewater. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Health and Human Services

Dental Hygiene

DAS128 INTRO TO DENTAL TERM AND ANAT

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will introduce basic concepts in dental terminology and neck anatomy necessary for preparation for beginning technical study in expanded functions of dental auxiliary procedures. This course is useful for students who are not currently employees in a dental setting, who have not completed a post secondary dental assisting program or at least one year of an accredited dental hygiene curriculum.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV161 WASTEWATER TRTMT-PRIMARY TRTMT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of wastewater treatment. The topics of this course include general issues regarding the steps in primary treatment of wastewater. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL130 CNC TRNG CTR PROG EIA FORMAT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This Computer Numerical Control course provides the core knowledge to read, understand, and edit the various programming formats used in standard EIA/ISO, and Macro types of programming used in turning center operations. With assigned lab projects, the student will reinforce the concepts covered.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT208 ACDELCO BODY CONTROLS & COMMNT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers the advanced concepts and applications of multiple body controllers with multiple inputs and outputs. Communication languages, multiplexing, and complex networks in automotive applications are also presented. This course also discusses how the body control module controls the operation of various features and subsystems used on most vehicles. The instructor will demonstrate diagnosis and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to vehicles with body control systems. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Engineering Tech

Engineering/Applied

ETD227 SPECIAL TOPICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Special topics in Engineering, Industrial, and Emerging Technologies Division.

Pre-reqs:

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

MGT236 Sports & Ethics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to assist students in examining and developing philosophies, values and moral reasoning skills to make ethical decisions in the sports management field. This course examines topics including violence, doping, racial and gender equity, coaching, commercialization, enhancing stimulants, eligibility, violence, sportsmanship and code of ethics in sports. Students will examine current and historical events in sports, rules, laws and governing organizations.

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM121 EFFECTIVE SPEAKING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to help students develop effective speaking skills so that they are better prepared to speak before groups in business or industry. Principles of content selection, organization, audience analysis, and projection are studied. TAG approved course- OCM004 effective Summer 2007. TMCOM Approved effective Autumn 2008.

Pre-reqs:

Health and Human Services

Nursing

HTD204 HLTH INDEP STUDY

Credit Hours: 4 Contact Hours: 40 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Health Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Health Technology will determine course content, meeting schedules and credit hours.

Pre-reqs:

Information Tech

Computer Security

Information Tech

Computer Security

CFS256 DISASTR RCVRY AND INCIDENT PLN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is a detailed examination of the aspects of contingency planning operations. Demonstrations and hands-on practice will reinforce topics such as incident response-prevention, detection, reaction, disaster recovery, and business continuity. Upon completion, the students will be able to provide documentation for a disaster recovery plan.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT287 GM HVAC CERTIFICATION ASSMT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the students the skills necessary to work with HVAC systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing HVAC systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in this course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL122 CNC MILL OPERATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This Computer Numerical Control course has been designed to help students read, understand and develop the confidence to edit the various programming formats used in standard EIA/ISO, Conversational and Macro types of programming used in mill operations. The students will be given the opportunity to apply the information learned from the lecture portion of the course on the mills available to enter the various Ariel styles of programs into the machine tool control.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL145 COMPRESSOR ION NITRIDING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course teaches students about the processes, procedures, and techniques for ion nitriding compressor parts in preparation for nitriding equipment. Students will learn how to prepare a load for a nitriding operation and appropriately remove parts from the nitriding unit upon completion of the nitriding operations.

Pre-reqs:

Business/ Entrepreneurial

Business Studies

BTD224 BUSINESS CO-OP

Credit Hours: 4 Contact Hours: 40 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Co-op opportunities are available to students enrolled in Business Technologies. Students may contact their faculty advisors or Career Services for more information.

Pre-reqs:

Accounting/Finance

ACC235 FORENSIC ACCOUNTING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an overview of the methodology of forensic accounting and fraud investigation which involves obtaining documentary evidence, interviewing witnesses, writing investigative reports, testifying to findings, and examining forensic documentation. Students will apply prevention, detection, and investigative strategies to determine why and how occupational fraud is committed. Upon completion of this course, students should be familiar with the basic concepts of forensic accounting and fraud prevention and detection.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV137 WATER TREATMENT II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Using the internet, students will focus on issues of concern to surface water treatment facilities. The topics of this course include reservoir management, taste and odor control, corrosion management, softening, demineralization, and trihalomethanes. Instrumentation and sludge handling and disposal issues are also addressed. Along with reading assignments from the text, the course is augmented with audio, photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

HVC123 SHEET METAL LAYOUT I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers layout and forming of basic sheet metal fittings using drawing equipment and construction paper. Topics include square/round ductwork, tapers, transitions and offsets.

Pre-reqs:

ENV148 WATER DISTRTN SYS-DISTRIB FAC

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The specific topics of this course involve the issues of water distribution systems and facilities. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT121 AUTOMOTIVE TECH SKILLS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This is an introductory level course that will provide the student with an understanding of the correct use of precision measuring equipment, hand tools, shop equipment, cutting torches and service repair information. Emphasized throughout the course will be shop safety procedures and the correct handling of hazardous waste materials. Applied physics fundamentals will be introduced, along with repair procedures for basic automotive components such as: fasteners, bolt hole repair, drilling and tapping, heli-coil and time- serts, fastener tensile strength and torque to yield. Classroom learning will be reinforced by lab activities.

Pre-reqs:

Business Studies

BTD204 BUS INDEPENDENT STUDY

Credit Hours: 4 Contact Hours: 40 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Business Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Business Technologies will determine course content, meeting schedules and credit hours.

Pre-reqs:

Health and Human Services

General Health

HTH121 INTRO TO HEALTH CAREERS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The course is an introduction to the health care delivery system and the associated career opportunities within it. The course provides the student with the opportunity to explore career choices including educational, occupational, and professional requirements, employer expectations, job outlooks and related industry trends.

Pre-reqs:

Nursing

Health and Human Services

Nursing

NUR225 TRANSITION FOR THE PARAMEDIC

Credit Hours: 6 Contact Hours: 11 Lecture Hours: 3 Lab Hours: 8 Other Hours: 0

This course is designed for the Paramedic who is admitted to the Nursing Program with advanced standing. Content includes an introduction to the Associate Degree Nursing philosophy and concepts of the nursing profession. Emphasis is placed on the nursing process, nursing health assessment and the roles and responsibilities of the professional nurse. Trends in nursing and role transition will be explored. Select nursing skills will be evaluated in the learning laboratory as a means of validating safe performance of the skills. Students must have internet access in order to successfully complete this course.

Pre-reqs:

Engineering Tech

Engineering/Applied

ETD226 SPECIAL TOPICS

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Special topics in Engineering, Industrial, and Emerging Technologies Division.

Pre-reqs:

Information Tech

Computer Security

IMT137 DRAWING BASICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers principles of drawing such as: line, shape, contour, volume, texture, perspective, and composition. Course will cover topics such as: drawing for realism, abstract drawing, storyboarding, and thumbnail sketching.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ARL233 IND APP, CUSTOMERS & PRODUCTS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will explore the fundamental uses of compressors in a production environment. Types of customers, distributors and end users pertaining to their specific needs will be reviewed. Specific applications will be related to the applicable compressor unit families. Key subcomponents of the compressor system will also be reviewed and studied as to how they operate as a compressor unit in a package.

Pre-reqs:

HVC237 HVAC COMMERCIAL CONTROLS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will further the students knowledge of control by introducing the student to the equipment and devices that control HVAC commercial equipment, pnuematics, and Direct Digital Controls. The lectures/labs will discuss the function, operation, service, and how to troubleshoot the controls.

Pre-reqs:

Engineering Independent Study

ETD223 ENGINEERING CO-OP

Credit Hours: 3 Contact Hours: 30 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Co-op opportunities are available to students enrolled in Engineering Technologies. Students may contact their faculty advisors or Career Services for more information.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

IRT133 THEORY FOR SCOPISTS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will learn realtime electronic shorthand with instruction utilizing online, computer-aided transcription technology, with emphasis on note reading, editing, and transcribing practice in preparation for more advanced courses in the program. Upon completion, the student should be able to read, translate, and edit computer-generated machine shorthand notes taken by court reporters for transcript production.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV164 SUSTAINABLE GR BLD TECH

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This is an introductory course providing information on how Green Building Technologies improve the environment through proper site development considerations-including brownfield site remediations strategies, storm water run-off management, renewable energy sources, and managing water efficiency in buildings. Improving energy efficiencies through passive solar heating and cooling methods are emphasized. Selecting building materials made from rapidly renewable resources or made with recycled content are discussed. Economic and social benefits of Green Building Technologies are also emphasized. Students are exposed to the "Leadership in Energy and Environmental Design: (LEED) Green Building Rating System established by the U.S. Green Building Council.

Pre-reqs:

Health and Human Services

Medical Assisting

MAT121 MEDICAL ASSISTING I

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

Medical Assisting I introduces the students to the profession of Medical Assisting and their responsibilities in the clinical area of the health care facility. Emphasis is placed on the "Total Concept of Patient Care" communication skills and the techniques employed by the medical assistant during a general physical examination: taking and recording vital signs, measuring visual and hearing acuity, practicing and applying medical and surgical asepsis and infection control. The students will also demonstrate the proper techniques employed in performing irrigation of the ear. Students will begin to understand the process of assisting with minor office surgical procedures, sterile dressing changes and suture removal. Pathophysiology is presented as related to procedures. CTAG CTMAT008 approved Spring 2012.

Pre-reqs:

Engineering Tech

Engineering

Engineering Tech

Engineering

EET142 LGHT DES, APP AND ELECL ELEM I

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Develop the skills to design and apply functional and practical lighting systems for industrial and commercial properties. The topics covered include the physical nature of light, color, and sight behavior; and understanding of photometry of light, along with design criteria and calculations including the zonal cavity method; complete coverage of light sources, and application techniques using fixtures, along with the electrical elements necessary for design and controlling of today's and tomorrow's illumination systems.

Pre-reqs:

Engineering/Applied

ENV139 WATER ANALYSIS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Using the internet, students will be introduced to basic laboratory safety and gravimetric, spectrophotometric, electrochemical, titrimetric and microbiological methods. The units include instruction on the procedures for regulatory sampling and safety, and specific analytical procedures for total residue, fluoride, pH, ammonia, acidity, alkalinity, calcium, chloride, hardness, and coliform analysis. This is a 100% web-based course.

Pre-reqs:

ENV154 WATER DISTRIBTN SYS-WATR MAINS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The specific topic of this course is that of water mains for distribution systems. Along with reading assignments from the text, the course in enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Health and Human Services

Fire and EMS

Health and Human Services

Fire and EMS

EMS121 EMERGENCY MEDICAL TECHNICIAN

Credit Hours: 7 Contact Hours: 11 Lecture Hours: 5 Lab Hours: 6 Other Hours: 0

The Emergency Medical Technician (EMT) course provides theory and practical skills training for managing medical and traumatic situations at the EMT level and follows the objectives as listed in the Ohio Administrative Code. CTAG approved course CTEMTB002, effective Summer 2013.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

GER122 PSYCHOSOCIAL ASPECT OF AGING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Examines the process of aging from individual and societal perspectives. Uses a psychosocial approach to discuss the images of growing old, created by individual and institutional structures of society, as well as the myriad of patterns of inequality of gender, race, and economics that are compounded in old age. Topics include a discussion of speed of behavior, mental functioning, mental disorders, socialization, social support, economics and retirement, leisure activities, living arrangements, and death and dying.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL142 SMALL UNIT COMPRESSOR ASSEMBLE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the procedures, practices, and methods for assembling small unit natural gas compressors. Each component and part of the small unit natural gas compressor will be identified. Procedures for assembling parts and components will be demonstrated and practiced so that the student will be ready to assemble a small unit natural gas compressor.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

HIS222 World Civ from 17th Century

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will study world history from the mid-17th century to the present.

Pre-reqs:

Information Tech

Computer Security

IMT132 DIGTL PHOTOGRAPHY/GRAPHC&MEDIA

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course teaches the student the principles of digital still photography and enhances student skills in digital image manipulation. Topics covered include: focus, exposure, composition and lighting. Students must provide their own digital camera for the duration of the course. TAG approved course- OAH002

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT131 AUTO DETAILING BUS PRACTICES

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers the business side of the detailing profession. With minimal investment, detailing vehicles can start out as a small part-time job and build into a full-time business. This class addresses the questions of: How do I charge for these services, who are my customers, where do I purchase the right products at the right price, what do I need to get started, how can I advertise, and how do I protect myself and my investment? Case studies, guest speakers, and site visits will reinforce the entrepreneurial aspects of running your own detailing business.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KHUM99 Humanities Core Course

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV138 WATER DISTRIBUTION SYSTEMS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The topics of this course include water storage facilities, operation and maintenance of water mains, water quality issues, disinfection, and safety. This is a 100% web-based course.

Pre-reqs:

General Engineering

PET131 CORROSION BASICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides a basic understanding of the corrosion process, common corroding agents, methods of detecting and measuring corrosion and various methods of corrosion control. Special emphasis will be placed on cathodic protection. The course is designed to provide an introduction for technicians and operators who will deal regularly with corrosion.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KSOC999 Social Sciences

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Sciences

Biology

SCI273 Special Topics in Science

Credit Hours: 3 Contact Hours: 9 Lecture Hours: 0 Lab Hours: 9 Other Hours: 0

A sophomore level science capstone course designed for students pursuing an Associate of Science Degree within one of the Sciences degree programs. This course will provide a cumulative experience where students can apply the scientific skills and knowledge gained in the program to perform an inquiry-based project. The exact location, scope of the project, and method(s) of evaluation will be provided in a contract drawn up between the student, the faculty mentor, and if applicable, the host internship supervisor. An emphasis will be placed on the individual interactions between the student and the faculty mentor and/or internship supervisor. All students are expected to apply and expand on their current scientific knowledge, while learning the basic skills involved in project management. Registration for this course requires sophomore standing.

Pre-reqs:

Business/ Entrepreneurial

Automotive

ETD222 ENGINEERING CO-OP

Credit Hours: 2 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Co-op opportunities are available to students enrolled in Engineering Technologies. Students may contact their faculty advisors or Career Services for more information.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KMUS211 Music Theory from 1750 to 1900

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT288 GM ENGINE PERFORMANCE CERT AST

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the students the skills necessary to work with engine performance systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing engine performance systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in this course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Health and Human Services

Respiratory Therapy/MIST

RCT122 MED GAS ADMINISTRATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An introduction to the basics of oxygen administration, aerosol and humidification therapy.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT148 ENG MECH DIAG AND MEASUREMENT

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers the proper techniques and fundamental knowledge necessary to correctly isolate and diagnose abnormal engine conditions. Topics include: recommended diagnostic, measurement, and overhaul/repair procedures for GM engines.

Pre-reqs:

Business Mgt/Entrep

CUL126 FOOD PURCHASING-INVENTORY CONT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide Culinary Arts students with coverage of the essential concepts of purchasing, storeroom operations and fiscal responsibilities in a culinary operation. The students will be able to create market and distribution systems, design storeroom operation and inventory control procedures, determine cost controls and research product information.

Pre-reqs:

Educ/ Liberal Arts/ Math

English

ENG010 INTRODUCTION TO ACAD WRITING

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

This course is a writing-intensive course which emphasizes the composition process through individualized and group instruction in a workshop setting. It engages students in the writing habits, strategies, and skills needed to become confident, successful college writers.

Pre-reqs:

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KMUS111 Music Rudiments

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

SOC225 CULTURAL DIVERSITY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Provide students with an understanding of the cultural diversity of our changing society. Students will examine and discuss the diverse values and characteristics of ethnic and minority populations and how those values influence society, social and economic processes, and race relations. TMSBS Approved. Effective Autumn 2008.

Pre-reqs:

KSOC999 Social Sciences

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT246 REAR AXLE & PROPELLER SHAFT

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course provides students with the fundamentals of rear axle and propeller shaft operation. Topics include propeller shafts and limited-slip differentials, also included are proper maintenance, service procedures, basic vibration, and noise diagnosis.

Pre-reqs:

Educ/ Liberal Arts/ Math

English

SPN100 ELEMENTARY SPANISH I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers basic reading, speaking, writing, and listening skills and application of those skills.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT293 GM BRAKES CERTIFICATION ASSMT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the students the skills necessary to work with braking systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing braking systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in the course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Health and Human Services

Occupational Therapy

Health and Human Services

Occupational Therapy

OTA225 PHYS DYSFUNTION CLINIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 2 Other Hours: 1

Skill development in selected activities with emphasis on work simplification, fabrication of orthotics and routine evaluation procedures. Supervised work experience in a hospital or clinic setting treating individuals with neurological, orthopedic and other medical conditions.

Pre-reqs:

And OTA224 Can be Taken Concurrently

Medical Assisting

MAT123 MEDICAL ASSISTING III

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The "Total Concept of Patient Care" simulation gives Medical Assisting students the opportunity to incorporate and use their acquired knowledge of clinical and administrative procedures in health care delivery while working and managing the S & T Clinic. The S & T Clinic is a structured and controlled OSHA/CLIA compliant environment, simulating a medical office, for the sole purpose of integrating skills and preparing the student for externship in a clinical facility. Medical Assisting III precedes Medical Assisting Seminar, fifth semester. Seminar is an integral part of MAIII. Students will be recertified in CPR before completion of Medical Assisting III.

Pre-reqs:

MAT122

MAT225 EMERGENCY MEDICAL PROCEDURES

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed to enable students to become certified in American Red Cross Professional Rescuer and Standard First Aid. In addition, supplementary information is presented covering manual resuscitation with Ambu bags, administering oxygen, crash carts, and incident reports. Study of the disease process is integrated with illnesses, injuries, and treatment covered in the course.

Pre-reqs:

MAT122

Information Tech

Computer Security

Information Tech

Computer Security

ECA130 SOFTWARE VULNERABILITIES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Enumeration, exploits, keygens and other application vulnerabilities are presented. Security holes and exploitations in computer, interpreted and web based applications are addressed in a hands-on environment.

Pre-reqs:

And EET141

Engineering Tech

Engineering/Applied

MST227 METALLIC INERT GAS WELD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Study of application and use of continuous consumable with electrode application and MIG welding equipment. Properties of gases with regard to flow and regulation in gas metal-arc. Welding techniques are studied in relation to welding steels and non-ferrous materials.

Pre-reqs:

MST127

Health and Human Services

Occupational Therapy

OTA227 CLINICAL APPLICATIONS I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Supervised field work placement designed to provide in-depth experience in and responsibility for delivery of services to patients/clients. Emphasizes the application of academically-acquired knowledge leading to the performance level expected of an entry-level occupational therapy assistant.

Pre-reqs:

And OTA225

Physical Therapy

Health and Human Services

Physical Therapy

PTA124 MST PROCEDURES FOR PTA

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The student will learn data collecting and documentation for therapeutic measurement skills including goniometry and manual muscle testing.

Pre-reqs:

PTA123

PTA125 PROF CLIN PRACT FOR PTA

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course will focus on development of the professional clinical skills including critical thinking and clinical decision-making. The students will apply didactic concepts learned in Fundamentals of Physical Therapy and PTA Procedures I to clinical situations.

Pre-reqs:

And PTA221

Engineering Tech

Engineering

EET128 NEC AND ELECTRICAL SYS DES

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

A study of the National Electric Code as it applies primarily to the design of large commercial and industrial installations. Emphasis is placed on definitions, calculating conductor and conduct size, selection of circuit over-current protection, grounding, service sizing transformers connections, short circuit analysis, and other related subject material.

Pre-reqs:

EET122

Engineering Tech

Engineering

EET227 PLCS AND INDUSTRIAL CONTROLS I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A presentation of techniques, application and development analysis of relay control circuits with implementation of electromechanical devices, programmable controllers and variable frequency drives. Circuits, devices and techniques studied include control of motor starting, motor speed control, machine cycle control, control components, pilot devices, maintenance and troubleshooting circuits. CTAG approved Spring 2012 TMSBS.

Pre-reqs:

EET120

Information Tech

Computer Science

EET261 ADVCD NETWKG AND SECURTY TPC

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Session hijacking, trojans, virii, input validation and other types of attacks are covered in this class. Ghost Mail, NetCat and war dialers will be used as tools to provide counter measures against the computer criminal.

Pre-reqs:

And EET141

Engineering Tech

Engineering

EET262 PULSE AND DIGITL INTEGRATD CIR

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course is a study of pulse terminology, number systems and codes, TTL and CMOS IC logic circuits and interfacing, Boolean Algebra and logic simplifications, integrated arithmetic circuits, counter, register, encoders, decoders, multiplexers, and demultiplexers, display devices, IC flip-flops, hardware minimization techniques are also covered in conjunction with logic circuit design. TAG approved OET002 effective Summer 2009. CTAG CTEET002 approved Spring 2012.

Pre-reqs:

ECA128

Educ/ Liberal Arts/ Math

English

Educ/ Liberal Arts/ Math

English

ENG221 TECHNICAL REPORT WRITING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course stresses clarity, logic and appropriate organization in informal and formal technical reports. An oral presentation/proposal may be required. TMEC Approved effective Autumn 2008. Ohio Transfer Module Approved Spring 2012 TME002.

Pre-reqs:

ENG124

Engineering Tech

Engineering/Applied

EUT221 OVERHEAD LINE TECHNOLOGY III

Credit Hours: 6 Contact Hours: 10 Lecture Hours: 2 Lab Hours: 8 Other Hours: 0

Provides the knowledge and skill to identify, install and maintain primary underground residential distribution (URD) equipment; knowledge pertaining to the different styles of sub-transmission support structures, with instruction on the techniques and proper use of hot-line tools to work sub-transmission & distribution structures when laying out conductors and changing various insulators; knowledge and skill to safely perform rubber gloving assignments using the insulate and isolate techniques. Various methods of troubleshooting URD primary and secondary circuits are discussed and demonstrated. Students will perform various tasks, while working on an energized three-phase circuit under controlled conditions. Applicable safety requirements will be taught and stressed throughout the course of instruction.

Pre-reqs:

EUT122

Business/ Entrepreneurial

Accounting/Finance

ACC134 INTERNATIONAL LAW

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores the law and international transactions. Areas covered include: sovereignty, treaties, agreements, antitrust practices, property rights and international arbitration. Upon completion of this course, students should understand the sources of international law and its impact on businesses with international operations.

Pre-reqs:

ACC130

Business/ Entrepreneurial

Accounting/Finance

ACC223 COST ACCOUNTING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course places an emphasis on manufacturing and service organizations. Course coverage includes job-order costing, process costing, activity-based costing/activity-based management, standard costing and analysis of cost variances. Upon completion of this course, students should be able to apply the fundamental concepts of cost accounting to a variety of business decisions.

Pre-reqs:

And ACC133

Automotive

AUT232 FUEL INJECTION-EFI/PFI

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

EFI/PFI is an automotive elective course that discusses the various types of the throttle body and multiport fuel injection systems used with GM passenger cars and light trucks. Detailed descriptions of components and the operation of the fuel management systems are given by lecture and practical demonstration. The interrelationship of fuel system/emission controls devices operation and vehicle drivability problems is also covered. Special emphasis is placed on the correct application of diagnostic flowchart information. Student learning is reinforced by participation in laboratory exercises utilizing Scantools and other specialized diagnostic equipment.

Pre-reqs:

AUT223

Sciences

Biology

BIO122 ANATOMY AND PHYSIOLOGY II

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This is the second course of a two-semester anatomy and physiology sequence, focusing on the influences of the autonomic nervous and endocrine systems upon the cardiovascular, lymphatic, respiratory, renal, digestive and reproductive systems. Introductory immunology, fluid/electrolyte, and acid-base balance concepts are included. The laboratory portion includes continued study of the human cadaver and preserved mammalian organs, additional interactive computer simulations of physiological processes, conduction of wet labs, and presentation of case studies which allow the student to compare and contrast normal physiologic mechanisms with basic pathophysiology.

Pre-reqs:

Or BIO123

Sciences

Biology

BIO124 HUMAN DISEASES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course encompasses the etiology, pathogenesis, manifestations and basic treatment of diseases and disorders of the human body. Special attention is given to organic and infectious diseases as well as immune dysfunction and neoplasia. Case studies are utilized to gain an understanding of disease processes and treatments. TAG approved course - OHL019 effective Fall 2005.

Pre-reqs:

BIO122

BST250 BIOPROCESSES AND MANUFACTURING

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

In this course students will learn the processes used for large scale biotechnology related production processes such as fermentation with a focus on regulatory and quality assurance aspects of this type of manufacturing, such as Good Lab Practices (GLP), Good Manufacturing Practices (GMP) and procedures/practices defined by the International Standards Organization (ISO).

Pre-reqs:

BST122

Engineering Tech

Engineering

CET123 ARCHITECTURAL DRAFT II

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course concentrates on the preparation of building details and sections. Emphasis will be placed upon the design of details and their synthesis into a final graphic product.

Pre-reqs:

CET122

Engineering Tech

Engineering

CET221 SURVEYING GRAPHICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce the student to computerized methods of preparing the various types of maps used by surveyors, civil engineers and contractors. Students will also learn how to prepare plans from electronic data recorders. Coding techniques for field use of data recorders will also be discussed.

Pre-reqs:

CET227

CET233 ARCHITECTURAL DESIGN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

The basics of design will be examined while solving architectural design problems. The student will be required to prepare preliminary design drawings that fully express the intended solution.

Pre-reqs:

CET122

Sciences

Chemistry

CHM141 GENERAL CHEMISTRY I

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

A broad overview of chemical principles and reactivity. Topics include atomic structure, chemical bonding and molecular structure, inorganic compounds, organic compounds, chemical periodicity, stoichiometry and nuclear chemistry. This course is Ohio TAG approved. OSC023 sequence & OSC008 Effective Summer 2008. OTM approved for TMS Spring 2011.

Pre-reqs:

CHM101

Engineering Tech

Engineering

Engineering Tech

Engineering

DET231 TOOL DESIGN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course covers the design and drawing of production jigs, fixtures, and stamping dies. The emphasis in jig and fixtures is placed on coordination of machine tools and standard component parts, using symbol libraries and AutoCAD to draw the final layout. While in stamping dies, a step-by-step approach is emphasized in drawing the details and assembly of a die including material punches, die sets, strippers, gauges, pilots and presses.

Pre-reqs:

DET124

Educ/ Liberal Arts/ Math

Social Sciences

SOC222 JUVENILE DELINQUENCY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduces students to the nature and causes of juvenile delinquency. Major theories proposed as explanations of delinquent behavior are reviewed and evaluated. Students will gain an understanding of the life experiences leading up to delinquent behavior, to the external and internal influences on the delinquent and to the choices that lead to a life of crime. Topics such as status offenses, substance use and abuse, street crime and gang membership will be discussed. Preventive strategies, community-based corrections and institutions for juveniles will be reviewed.

Pre-reqs:

SOC121

Engineering Tech

Engineering

EET122 AC CIRCUIT ANALYSIS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Alternating current (AC) circuit analysis and instrumentation. Topics include: phasor analysis, RL, RC and RLC circuits network theorems, power, resonance, fitters, pulse analysis, transformers and three phase systems. TAG approved course-OET003 effective Spring 2008.

Pre-reqs:

EET120

Health and Human Services

Health Information

Health and Human Services

Health Information

HIT233 CLINICAL CLASSIFICTION SYS III

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

Applying coding guidelines of previously learned coding principles through advanced coding practices with accuracy and completeness, using manual and computerized encoding systems; clinical coding and applying reimbursement methodologies; health information management; coding compliance and data quality.

Pre-reqs:

HIT124

Sciences

Chemistry

CHM121A GEN, ORG AND BIOL CHEMISTRY IA

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

A broad overview of inorganic chemical principles. Topics include significant figures, atomic structure, chemical bonding and molecular structure of inorganic compounds. TMNS approved Spring 2012.

Pre-reqs:

CHM101

Biology

BIO101B INTRO TO ANAT AND PHYSIO B

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 1.5 Lab Hours: 0 Other Hours: 0

Introduction to Anatomy and Physiology provides an understanding of human structure and function of all body systems. Focus will be given to beginning chemistry principles, cells, and tissues. Module two covers the following body systems (Endocrine, Cardiovascular, Lymphatic/Immune, Respiratory, Digestive and Urogenital). This course is for the student who has successfully completed BIO101A.

Pre-reqs:

BIO101A

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

AIT134 PREDICTIVE MAINTENANCE TECH I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to familiarize the student with predictive maintenance technologies in the area of using oil, thermography, vibration, and ultrasonic analyses.

Pre-reqs:

MST221

AIT224 WIND TURBINE ENERGY SYSTEMS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an in-depth understanding of wind turbines including the service and maintenance of these systems.

Pre-reqs:

AIT223

Health and Human Services

Nursing

NUR224 NURSING SEMINAR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course examines issues related to the role transition from student to entry-level associate degree nurse. Emphasis is placed on student's involvement in exploring issues relevant to practice as a staff nurse.

Pre-reqs:

And NUR222

Medical Assisting

Health and Human Services

Medical Assisting

MAT226 MEDICAL OFFICE MANAGEMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to prepare potential managers and supervisors to develop a broad perspective and gain insight into human relations. The course deals with basic management principles and focuses on problem solving, conflict resolution, hiring, training, appraising and disciplining employees. It also teaches management duties such as marketing the practice, financial management, and physician credentialing. Laws that relate to employment are also part of the course.

Pre-reqs:

MAT122

Information Tech

Administrative Srv Off Applion

IRT233 TRANS & EDITING FOR SCOPISTS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will learn transcription, editing, and research skills specific to the scopist/reporting profession. Instruction utilizing online, computer-aided transcription technology, with emphasis on note reading, translating and editing skills, grammar and proofreading skills, research techniques, and globalizing steno entries. Upon completion, student should be able to read, translate, edit, globalize steno outlines, and print for transcription production.

Pre-reqs:

IRT133

Or IRT122

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM125 INTRO TO COMMUNICATION THEORY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide students with a survey of the basic elements of communication in a variety of contexts including interpersonal, group, organizational, intercultural, and mass media. Analysis and application of communication theories is emphasized as well as the study of current communication theory research. This course is Ohio TAG approved. OCM001 effective Summer 2008.

Pre-reqs:

IDS102

Or IDS102

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM223 INTERVIEWING I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to the art of interviewing. Students will study the principles and practices of interviewing as well as the application of effective interviewing methods in real-life and role-playing assignments. Topics of exploration include question strategies, approaches, structures and types of interviews from both aspects of interviewer and interviewee.

Pre-reqs:

COM122

Engineering Tech

Engineering/Applied

AET122 ANALYSIS/APP OF SET

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses the different types of sustainable alternative energy and the analysis, applications, and maintenance of sustainable alternative energy systems. Predictive analysis will be addressed to identify problems before a catastrophic failure develops. Infrared thermal imaging technology procedures will be covered in this course. Ultrasonic examination procedures will be addressed to detect problems. Electrical testing procedures will be covered with a review of AC and DC circuit analysis. Physical inspections, operating characteristics, functions, and real world applications are discussed and analyzed through different experiments and site visits.

Pre-reqs:

AET121

MST137 6G WLDG CERT EXAM PREP

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

This course will cover: the fit-up and welding of pipe in 5G and 6G positions (uphill) using the SMAW process, the welding of root and hot pass methods done with E-6010 electrodes, and the fill and cap pass using E-7018 electrodes. Students will perform destructive tests per American Society of Mechanical Engineers (ASME) Section IX Boiler and Pressure Vessel Code.

Pre-reqs:

And MST128

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

ENT124 MANAGNG ENTREPRENEURIAL GROWTH

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed for students who want to manage growing companies in an increasingly professional manner while still maintaining the entrepreneurial spirit that brought the company to its current growth position and for students who want to manage larger companies to emphasize innovation and the management of opportunities rather than to concentrate on the efficient management of ongoing operations. Upon successful completion of this course, students should be able to measure economic performance and obtain information for management decision-making, management control systems for innovative companies, short-and long-run planning in owner-managed businesses, and entrepreneurship in managing growing companies.

Pre-reqs:

ENT120

Engineering Tech

Engineering

MET227 THERMODYNAMICS & HEAT TRANSFER

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Fundamentals of thermodynamics: heat, work and energy. Thermodynamic processes: constant volume, constant pressure, isothermal, adiabatic and polytropic, P-V-T relationships, work and internal energy. Laws of thermodynamics: enthalpy, entropy and reversibility. Gas power cycles and efficiencies: Carnot, Otto, and Diesel. Fundamentals of heat transfer: conduction, convection, radiation and heat exchangers. Emphasis is placed on learning the fundamentals and applying them to solving problems.

Pre-reqs:

And MTH125

Health and Human Services

Dental Hygiene

DHY225 ANESTHESIA AND PAIN CONTROL

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

This course will teach the basic concepts of anesthesia and pain control as they relate to patient management in the provision of comprehensive dental hygiene care. Lecture will focus on theory of pain control, selection of pain control modalities and implications of local anesthesia. Topics will utilize knowledge and review of anatomy, physiology and pharmacology. Lab includes competency based practice of the administration of pain control modalities.

Pre-reqs:

And DHY132

Information Tech

Computer Security

Information Tech

Computer Security

NET135 CCNA PHASE II

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course focuses on initial router configuration, Cisco IOS software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Students will learn how to configure a router, manage Cisco IOS software, configure routing protocols on routers, and set access lists to control access to routers. Technologies include Cisco IOS Software Management, router configuration and file management, RIP and IGRP routing protocols, TCP/IP error and control messages, and Access control lists.

Pre-reqs:

ECA134

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM230 ARGUMENTATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to rhetorical theory particularly as it relates to the theory and practice of argumentation. Students will have the opportunity to practice argumentation in academic debating and persuasive speaking. Students will also study the theoretical foundation of argumentation and its application in various contexts.

Pre-reqs:

Or Test & Score: ACT Reading - 19

Or Test & Score: Compass Reading - 080

Business/ Entrepreneurial

Business Mgt/Entrep

FAS221 INTRO TO TEXTILES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An introduction to the qualities and properties of fabrics and textiles with emphasis placed on identifying and evaluating the characteristics of textile materials such as natural verses man-made fabric construction. By investigating the fibers, quality, construction, care and finishing of textiles, students are expected to identify fabrics and specify fabric usage in the fashion industry.

Pre-reqs:

FAS121

Information Tech

Computer Science

Information Tech

Computer Science

CIS222 DATA ACQUISITION AND ANALYSIS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course is designed to build skills and confidence in data analysis and report writing. A substantial part of this time is spent analyzing data/datasets and producing a report using the techniques learned in the course. Using a workshop type learning atmosphere, the instructor advises participants in the analysis of the datasets and preparation of reports. Topics include frequency distributions, measures, and graphical presentation.

Pre-reqs:

Or ECA253

Health and Human Services

Medical Lab

MLT222 CLINICAL CHEMISTRY

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3.5 Lab Hours: 3.5 Other Hours: 0

The course is designed to introduce the student to the principles of laboratory instrumentation, clinical chemistry procedures and quality control concepts. The course covers renal and liver function; carbohydrate, lipid and protein metabolism; hormones; electrolytes and mineral balance; blood gases; and clinical enzymes and therapeutic drug monitoring. The class uses lecture, case studies and laboratory procedures.

Pre-reqs:

And MLT121

Information Tech

Computer Science

WDD121 INTERNET/INTRANET DES & DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, fundamentals of web design, and the HTML and CSS markup languages will be studied. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a static website.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Information Tech

Computer Science

WDD224 ACTIVE SERVER PAGE DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on server side programming with ASP.Net. Students learn to connect to a database, add, update, and delete from the database, create user controls, master pages, XML driven site navigation and login pages. ASP.Net web controls are emphasized. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA228

WDD223 CONTENT MGT SYS DEV DES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course teaches students to set up, design, and customize various open-source content management systems. In addition, students will be instructed on the various ways to add shopping cart functionality to those systems. Upon completion, students will be able to make customizations to various open-source content management systems.

Pre-reqs:

And ECA228

WDD226 WEB DEV WITH PHP AND MYSQL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn to develop server side scripts with PHP including developing various web applications and connecting to a MySQL database. Additional topics include the development and design of the MySQL database. Upon completion, students will be capable of utilizing PHP to develop web applications and connect to a MySQL database. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

And ECA127

Information Tech

Computer Science

WDD228 SEARCH ENGINE OPTIMIZATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on optimizing HTML code for search engine placement. Topics include link building, natural optimization vs pay per click, understanding web statistics and conducting online PR campaign.

Pre-reqs:

Or WDD121

WDD227 ADV WEB DEV W PHP AND MYSQL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An advanced course in PHP and MySQL focusing on web database integration. Learn more advanced techniques such as image/file uploads and AJAX integration and develop a complete content management system in PHP and MySQL.

Pre-reqs:

ECA236

WDD231 FLASH ACTIONSCRIPTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on using Flash for web site creation. The student learns to use actionscripting to interact with Flash, load external data and create complex sites using components. Hans-on labs are utilized to reinforce the presented materials.

Pre-reqs:

And ECA127

Information Tech

Computer Science

WDD225 ADV ACTIVE SVR PAGE DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers advanced topics in the ASP.Net technology from Microsoft. Topics covered will be ADO.net, Converting data back and forth from XML, building custom controls and N-tier development. Several complete applications will be developed.

Pre-reqs:

ECA229

GIS231 GEOGRAPHIC INFORMATION SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course emphasizes the principles and concepts of a geographic information system and its applications. Upon completion, students will understand the components that make up a geographic information system, the proper project planning processes, components of global positioning systems, and how to build data layers through imagery identification and basic data queries.

Pre-reqs:

GIS123

Health and Human Services

Physical Therapy

PTA224 PTA PROCEDURES II ORTHO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected orthopedic, integumentary, rheumatological and cardiovascular conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

And PTA125

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT221 FUEL AND EMISSIONS MGT SYS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

The operation, diagnosis and servicing of fuel management and emission control systems is covered by lecture and demonstration. Emphasis is placed on the identification and servicing of specific manufacturers' systems using specialized test equipment, 4 and 5-gas analyzers will be used to reinforce student learning. Laboratory activities include diagnosis and repair of throttle body, port fuel injection systems, and emission control devices such as those utilized with EGR, AIR, and EVAP systems.

Pre-reqs:

AUT125

AUT227 COMPUTERIZED VEH CONTROL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

The purpose of this course is to give the student instruction on the operations of an automotive computerized system. Lab activities will include problem solving skills with diagnosis in servicing of computerized fuel, ignition, and emission control management systems. Testing of these systems will be accomplished with the use of specialized diagnostic testing equipment such as DVOM's, scanners, and voltage tracing scopes. This course will use the past knowledge that the student learned in the previous electrical and engine classes.

Pre-reqs:

AUT125

Information Tech

Administrative Srv Off Applion

AOT224 LEGAL OFFICE PROCEDURES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an introduction to the unique characteristics of law office organization and management with an emphasis on computer applications in law. A general introduction to nonlitigation responsibilities and fundamentals of grammar, style and letter writing are covered. Upon completion, students should be able to demonstrate an understanding of concepts and procedures in a law office.

Pre-reqs:

OAD121

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

HVC234 HVAC ELECTRICAL SYS & APPLIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides the knowledge and skills to understand and safely install, service, and troubleshoot HVAC/R electrical circuits and electronics. Basic electrical foundation fundamentals are provided. HVAC/R electricity and electronic circuits are covered in depth. A focus on proper meter usage is engrained in the process. Motors, controls, and other electrical/electronic devices are covered also. The sequence of operation and diagnostic trouble-shooting, utilizing pictorial, schematic, and hands on approaches are provided.

Pre-reqs:

MTH101

Health and Human Services

Medical Lab

MLT125 IMMUNOHEMATOLOGY

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

This course introduces the concepts of basic genetics of red cell antigens. The student will study the significance of the blood cell antigens and antibodies. The course includes ABO and Rh typing, crossmatching procedures, antibody detection and identification. A study of hemolytic disease of the newborn, its treatment and detection is included. Other topics in the course are composition and use of the specific blood component, overview of donor requirements.

Pre-reqs:

MLT126

Information Tech

Computer Security

CFS257 FILE SYSTEMS ANALYSIS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is a comprehensive overview of contemporary volume and file systems. Topics include, discovering hidden evidence, recovering deleted data, data structures, and tool validation. Students will analyze example disk images, and participate in advanced investigation scenarios.

Pre-reqs:

Or CFS137

Information Tech

Computer Security

CFS136 PRINC OF INFORMATION SECURITY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines the current standard of due care and best business practice in information security. Demonstrations and hands-on practice will reinforce topics such as evaluation and selection of security models, risk management, threat analysis, organizational technology evaluation, security implementation, disaster recovery planning and security policy formation and implementation. Upon completion, the students will be able to examine security technology, methodologies and practices.

Pre-reqs:

Or ECA146

CFS275 ETHICAL HACKING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course, students learn to discover weaknesses in operating environments using the well known hacking methods. Students will acquire the knowledge to systemically test and exploit internal and external defenses. Students will learn the countermeasures used to mitigate and reduce risk to enterprise networks. Students will be taught how to crack security systems so they can advise organizations on how to protect their systems.

Pre-reqs:

NET120

Engineering Tech

Engineering/Applied

AIT226 ROBOTIC VISION

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will provide knowledge and skills to set up and program an industrial robot for vision applications. Student will learn about hardware, software, and concepts for setting up a vision system for a Fanuc robot. At completion of course student will be able to setup an industrial robot tocomplete a vision task.

Pre-reqs:

AIT135

Engineering

Engineering Tech

Engineering

CET125 SOIL MECHANICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course includes laboratory tests, soil classification systems, and theoretical concepts relative to soil strengths, stresses in soil masses, settlement under structures, bearing capacity for shallow foundations, retaining walls and slope stability. TAG approved course- OET017 effective Summer 2007.

Pre-reqs:

And MET124 Can be Taken Concurrently

MET232 FUEL CELL PROJECT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In coordination with faculty advisor, student works on a project to design and build a fuel cell system by selecting a marketing need (vehicular, portable, home, industry...), determining components, developing cost justification, documenting design process, creating bill of materials, procuring necessary materials, documenting methodology assembling a model, evaluating performance, and presenting the proposal.

Pre-reqs:

MET231 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

MTH226 LINEAR ALGEBRA

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

In this course students will study vectors in Rn and operations with vectors including addition, scalar multiplication, dot product, determination of orthogonality, and computation of the angle
between vectors. They will use Gauss-Jordan elimination and other matrix methods to solve systems of linear equations and therefore perform common matrix operations including transposition and computation of inverses. Spanning sets and linear independence will be examined in regard to subspaces of Rn along with proofs of theorems concerning rank and nullity. Students will explore linear transformations from Rn to Rm and gain an understanding of kernel and image as well as the relationship between a linear transformation and its matrix representation. Matrix products will come to be viewed as a composition of linear transformations. Through the use of determinants, students will learn of row operations and their affects on the determinant. Further topics will include eigenvalues, eigenvectors, characteristic polynomials, and the axioms of abstract vector spaces over real or complex fields. TAG approved course OMT019, effective Summer 2013.

Pre-reqs:

MTH224

Sciences

Physics

Sciences

Physics

PHY122 COL PHYSICS II W ALG

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

General topics are waves, electricity, magnetism (including circuits), electromagnetic radiation (including light). Emphasis exercises and problem solving using formulas, algebra, and some trigonometry. Laboratories focus on the correct reading of measuring instruments, proper handling of measurements in calculations, and testing whysical theories using measured data.

Pre-reqs:

PHY121

Business/ Entrepreneurial

Accounting/Finance

FIN227 MONEY AND BANKING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will address the economic concepts associated with money, financial institutions and monetary policy. Topics covered include: financial markets and interest rates; the structure and management of financial institutions; the structure of central banks and the Federal Reserve System; and, determininants of the money supply and the tools of monetary policy. Upon successful completion of this course, students should be able to apply and demonstrate an understanding of the above topics relative to today's economy.

Pre-reqs:

BUS124

Health and Human Services

Health Information

HIT229 HLTH INFO SYSTEMS AND TECH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Use of information technology in healthcare; computer concepts, communication and network technology; data quality and databases; data security; planning, evaluation and selection of information systems; HIM specialty systems, healthcare information systems; emerging technologies; emphasis on the electronic health record.

Pre-reqs:

Or ECA180

Sciences

Physics

Sciences

Physics

PHY121 COL PHYSICS I W ALG

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Study of motion, force, momentum, energy, mechanical advantage, structure and properties of matter, fluids, heat. Problem-solving in orientation, emphasizing the application of formulas, algebra, and trigonometry to physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TAG approved course- OSC021(Not for Physics majors) approved Spring 2008. TAG approved course - OSC014 (not for Physics majors) approved Spring 2008. TMNS Approved effective Autumn 2008.

Pre-reqs:

MTH135

Biology

BST122 ADVANCED BIOTECHNOLOGY METHODS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course expands on the techniques and protocols introduced to the students in BST121. Advanced biotechnology/bioscience techniques such as gel electrophoresis, centrifugation, cellular and molecular sample preparation and handling will be added, while comprehensively reinforcing and strengthening skills in the performance of basic techniques and protocols.

Pre-reqs:

BST121

And MTH123

Or Test & Score: Compass Algebra - 055

Information Tech

Administrative Srv Off Applion

AOT224 LEGAL OFFICE PROCEDURES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an introduction to the unique characteristics of law office organization and management with an emphasis on computer applications in law. A general introduction to nonlitigation responsibilities and fundamentals of grammar, style and letter writing are covered. Upon completion, students should be able to demonstrate an understanding of concepts and procedures in a law office.

Pre-reqs:

Or AOT121

Computer Science

Information Tech

Computer Science

CSE229 VISUAL BASIC DEVELOPMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses designing, developing, testing, and deploying desktop software applications using the Microsoft Visual Basic.Net programming language. This course will help prepare the student for MCTS certification in Microsoft Visual Basic.Net. Upon completion of this course, the student should be able to develop a desktop application with a graphical user interface, write code using Visual Basic control structures, properly validate user input, and test and debug the application.

Pre-reqs:

Or CSE122

CSE228 ASSEMBLY LANGUAGE PROG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The relationship between software languages and computer architecture is presented. This course examines assemblers, specification and translation of programming languages, linkers and loaders, block structure languages, parameter passing mechanisms and a comparison of programming languages. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or CSE233

CPD121 DATA MODELING AND DATABSE DSGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces database concepts and describes how to properly design, create and interface with a relational database. The course begins with definition of important terms. It demonstrates the specific rules that one must follow to design and create a normalized relational database. SQL is also an important topic. Students complete a collection of hands-on labs to learn how to apply the techniques presented.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Information Tech

Computer Science

SGE121 GAME DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Categories of video games, design principles related to different processing platforms, current animation techniques, and current software packages available for creation of video games are all major topics. The focus of this course is to familiarize the student with design technologies and software available to implement animation used for video games. The student will gain an overall view of the gaming industry.

Pre-reqs:

Or Test & Score: ACT Reading - 14

SGE222 3D GAME DESIGN AND DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on 3D game development. The student will learn the essentials of 3D game development, including basic algorithms, texture mapping basics, 3D math, lighting, etc.

Pre-reqs:

ECA281

CSE230 ADV VISUAL BASIC DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines advanced features of the VB.NET language and the .NET Framework. The course also examines object-oriented programming topics, including controlled inheritance and the use of cross language inheritance. Comprehensive hands-on lab exercises using Visual Studio.NET reinforce instructor lectures and build direct competence in the topics presented throughout the course. Upon completing this course, the student should be able to create applications utilizing data connections, datasets, and datatables.

Pre-reqs:

Or CSE229

Information Tech

Computer Science

CSE235 PYTHON DEVELOPMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will introduce the student to basic programming and syntax, CGI programming, object-oriented techniques, GUIs, exception handling, regular expressions, XML programming, DB-API database integration, networking, security and wireless application development using the Python development environment. Coverage includes control structures, functions, classes, inheritance, string manipulation, security, syntax, objects, exceptions, CGI, GUIs, XML, DB-API, networking, data structures, multimedia, and Python for wireless/handhelds.

Pre-reqs:

ECA127

WDD122 WEB DESIGN GRAPHICS A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course covers creating and editing backgrounds and graphics for use on the internet. Students will learn appropriate design skills and techniques, design language and study color relationships through demonstrations and hands-on practice in order to reinforce the concepts as they use various leading edge technologies to create graphics. Upon completion of this course, students will be able to analyze web graphics and design.

Pre-reqs:

ECA228

WDD121 INTERNET/INTRANET DES & DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, fundamentals of web design, and the HTML and CSS markup languages will be studied. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a static website.

Pre-reqs:

IDS102

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

MKT225 Sports Sales

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce students to an analysis of effective skills necessary to the sales process found in the sports world. Students will develop effective communication skills, selling techniques, and examine the role of technology in the sports sales industry. Fairness, ethics and honesty in terms of sales will be stressed.

Pre-reqs:

MKT121

Information Tech

Administrative Srv Off Applion

ITD104 Computer Applications - PPT

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the use, styles and features of graphic presentation programs. Upon completion, students should be able to utilize MS PowerPoint as a basic business tool.

Pre-reqs:

ITD100

Business/ Entrepreneurial

Business Mgt/Entrep

CUL223 Catering & Buffet/Event Mgt

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide information for students to be able to plan, coordinate and execute catering jobs, set up and manage buffets and schedule and plan events as well as manage the events. Students will learn to coordinate the “front of the house” and “back of the house” activities to conduct a well-planned event which is catered on or off premise.

Pre-reqs:

CUL119

And CUL122

Health and Human Services

Nursing

Health and Human Services

Nursing

NUR221 NUR CARE PERSON/ALT I

Credit Hours: 6 Contact Hours: 12 Lecture Hours: 3 Lab Hours: 9 Other Hours: 0

This course introduces the nursing care of persons with alterations in health, with continued emphasis on technical nursing skills. The peri-operative experience is also introduced. The health care needs of the young and middle adult are examined. CTAG CTADNUR002 approved Spring 2012.

Pre-reqs:

And CHM121

Information Tech

Administrative Srv Off Applion

AOT132 RECORDS MANAGEMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an introduction to the fundamentals of a records and information management program. Emphasis is placed on learning and applying standard rules for alphabetic storage and retrieval; including the subject, numeric, and geographic filing methods. Also covered are basic concepts of a records management program and its system components as well as current electronic trends. Upon completion, students should be able to demostrate an understanding of the components of a records management program and competence in applying the generally accepted standard filing rules.

Pre-reqs:

IDS102

Educ/ Liberal Arts/ Math

Education

ASL221 AMERICAN SIGN LANGUAGE III

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide students with more opportunities to expand their ability to produce and comprehend the language as used in every day conversationall settings. Ten observation hours required.

Pre-reqs:

ASL124

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

SOC121 SOCIOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduces the general theories of the field, and research methods. Students will examine the impact of culture, social interaction, social structure, socialization, and social institutions on social behavior.

Pre-reqs:

Or PSY121

Health and Human Services

Health Information

HIT229 HLTH INFO SYSTEMS AND TECH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Use of information technology in healthcare; computer concepts, communication and network technology; data quality and databases; data security; planning, evaluation and selection of information systems; HIM specialty systems, healthcare information systems; emerging technologies; emphasis on the electronic health record.

Pre-reqs:

Or CIS126

HIT231 VIRTUAL PROF. PRAC LAB

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

The on-campus coding lab allows the student to apply previously learned coding skills in a simulated workplace setting; under direction of coding experts in the field, the student will practice technical, research and auditing skills while building accuracy and speed; coding a variety of authentic paper, electronic and hybrid records, using electronic applications and work processes.

Pre-reqs:

HIT124

Educ/ Liberal Arts/ Math

Education

Educ/ Liberal Arts/ Math

Education

EDU228 PHONICS FOR YOUNG CHILDREN

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Explores the theory and role of phonics and phonemics awareness as well as current research regarding phonics instruction. Five observation hours required.

Pre-reqs:

EDU221

Health and Human Services

Human Services

CDC224 CHEMICAL DEPENDENCY AND ETHICS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course provides students with specific content in the legal and ethical issues pertaining to chemical dependency counseling. Students develop skills related to obligations and procedures that encourage ethical conduct. Students use The State of Ohio Code of Ethics for Chemical Dependency Counselors as a guide for professional behavior. Topics include: responsibility to comply with The Code of Ethics, ethical complaints, sanctions, and impairment of chemical dependency counselors. Students develop skills in recognizing and finding solutions for ethical dilemmas.

Pre-reqs:

SWK125

Educ/ Liberal Arts/ Math

Criminal Justice

PLS123 LEGAL ETHICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explains the rules and standards of ethical and professional responsibility for both attorneys and paralegals, with emphasis on the Ohio Code of Professional responsibility and the corresponding duties of the paralegal. Topics include the competency, confidentiality, conflicts of interest, and the unauthorized practice of law.

Pre-reqs:

PLS121

Information Tech

Computer Science

Information Tech

Computer Science

CSE122 PROGRAMMING LOGIC & PROB SOLV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with structured programming principles through awareness and application of structured programming and object-oriented concepts and techniques. Upon course completion, the student should have an understanding of how to develop the logic to solve a programming solution using structured flowcharts and psuedocode.

Pre-reqs:

And ITD100

Or Test & Score: Computer Test - 18

CSE225 CROSS-PLATFORM MOB APP DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines the various methods for developing mobile applications that are compatible with various operating systems. Coding with frameworks that allow for deployment across different systems will be conducted. Upon completion of the course, students should understand how to create mobile applications that will function on different mobile and handheld devices.

Pre-reqs:

And ECA225

WDD121 INTERNET/INTRANET DES & DEV A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, fundamentals of web design, the HTML markup language, and the CSS style sheet language will be studied. Specific topics covered include the basic HTML webpage, configuring text and color with CSS, adding images, and best practices in web design. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a basic static website.

Pre-reqs:

And ITD100

Information Tech

Computer Science

CSE233A C++ PROGRAMMING A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course focuses on software engineering concepts, control structures, and functions found in C++. Principles of good software engineering are emphasized. Hands-on labs prepare students to solve real-world problems.

Pre-reqs:

CSE122

CSE221 ANDROID DEVELOPMENT 1

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers how to build mobile applications for the Google Android platform. The history and architecture of the Android operating system will be analyzed. Upon completion of the course, students will be able to create simple Android applications and also have an understanding of Android SDK Tools.

Pre-reqs:

Or ECA223

Sciences

Physics

PHY121 COL PHYSICS I W ALG

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Study of motion, force, momentum, energy, mechanical advantage, structure and properties of matter, fluids, heat. Problem-solving in orientation, emphasizing the application of formulas, algebra, and trigonometry to physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TAG approved course- OSC021(Not for Physics majors) approved Spring 2008. TAG approved course - OSC014 (not for Physics majors) approved Spring 2008. TMNS Approved effective Autumn 2008.

Pre-reqs:

And MTH130

Chemistry

Sciences

Chemistry

CHM101 INTRO TO CHEMISTRY

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

A problem-solving course to familiarize the student who has limited previous chemistry background with basic chemistry and mathematical skills. Course covers basic algebra skills, powers of ten (exponents), dimensional analysis, metric measurements and conversions, atomic theory, molecular structure, the periodic table and its uses, inorganic nomenclature, the mole concept, the gas laws and different types of solutions. The recitation portion of this class will involve pertinent problem-solving. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: Compass Algebra - 054

Information Tech

Computer Security

CFS287 NETWORK FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to teach students the skills required to identify, acquire, and analyze data gathered from network devices using both passive and active tools. Emphasis will be placed on the use of open-source security tools to conduct an analysis of network activity to gather information relative to an investigation.

Pre-reqs:

CFS137

Health and Human Services

Physical Therapy

PTA221 PTA PROCEDURES I

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 3 Lab Hours: 6 Other Hours: 0

This course will present to the students a comprehensive study of pain and its management; a study of the impairments, disabilities and functional limitations associated with burns, tissue repair, and pulmonary conditions; principles of physical agents/modalities usage including rationale, effects, adverse effects, contraindications, precautions, application, and documentation. Laboratory activities, written assignments, and competencies are required components of this course. Student may perform selected therapeutic interventions with patients under direct PT/PTA supervision as part of the laboratory components of this course.

Pre-reqs:

And PTA123 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Education

Educ/ Liberal Arts/ Math

Education

EDU128 RESPVE INFANT AND TODDLER ENV

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Infants and toddlers need to have an environment that is responsive to their needs and allows for safe exploration. Designs for safe yet nurturing indoor and outdoor environments will be explored. This course will also define various kinds of routines and experiences that will help to support children's development and learning by using appropriate materials and teaching strategies for each age group. Five obervations required.

Pre-reqs:

MTH131

EDU125 CHLDRN W PHYSICAL EXCEPTIONS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the range of service needs for students with mild to moderate physical impairments using an interdisciplinary team approach. Problem solving approaches and decision making models for use of adaptive materials, equipment, and intervention techniques are examined for assessment, planning, and service delivery. Five observation hours required.

Pre-reqs:

EDU131

Health and Human Services

Education

EDU129 RELSHP DEV FOR INFANTS/TOD

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Research indicates that infants within the first three months can detect and imitate others' behaviors and expressions. This course will focus on the child's emerging ability to become secure, express feelings, develop self-awareness and self-regulation that will help to establish secure and trusting attachments with their caregivers. This class will focus on the social-emotional development and how to develop strategies that enhance that area of development.

Pre-reqs:

EDU127 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT236 DB APP MICROSOFT ACCESS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers database applications on the microcomputer using the Microsoft Access program. Upon completion, students should be able to demonstrate proficiency in using MS Access to solve common business problems.

Pre-reqs:

ITD100

Or Test & Score: Computer Test - 18

Educ/ Liberal Arts/ Math

Mathematics

MTH124A Statistics, Module A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

And MTH094

MTH124 Statistics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

MTH093

Or Test & Score: Compass Algebra - 054

Education

Educ/ Liberal Arts/ Math

Education

EDU227 EARLY CHLD ED TECH PRACTICUM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

A 210-hour, supervised experience working in the early childhood education/caregiving setting. Open only to Early Childhood Education Technology majors. Weekly seminar participation required.

Pre-reqs:

Or EDU221

Mathematics

MTH107 Industrial Math

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the topics of elementary mathematics needed for applications in the vocational and technical curriculum. The operation and use of the scientific calculator as a problem solving tool will be emphasized. Topics include: basic concepts, fractions, the metric system, measurements, polynomials, basic right angle trigonometry, ratios and proportions, geometry, oblique triangles, the law of sines and law of cosines.

Pre-reqs:

MTH091

MTH108 Explorations in Modern Mathema

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce the student to the beauty and utility of mathematics in everyday life. The student will be able to reason critically, think creatively, assess evidence from conclusions, and use skills in abstract and quantitative thinking. Topics covered in this course will be: Thinking critically, numbers in the real world (percentages and index numbers), managing your money, statistical reasoning, describe statistical data using measures of center and spread, statistical inference, the normal distribution, solve basic probability applications, mathematics and business.

Pre-reqs:

And MTH092

Educ/ Liberal Arts/ Math

Mathematics

MTH105 Math for Allied Health

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to provide health science students with the mathematical skills and concepts required to be successful in allied health fields. Topics covered in this course will be: allied health applications, metric conversions, apothecary and household systems, systems of measurements, use of formulas, dimensional analysis, percent, decimals, fractions, ratios and proportions, direct and inverse variation, solutions, dosage calculations, allied health graphs, scientific notation, and statistical concepts.

Pre-reqs:

Or Test & Score: ACT Math - 19

Information Tech

Computer Science

DPH280 Photography Portfolio

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This capstone course will focus on developing a highly effective and professional quality photography portfolio from concept to final presentation. A portfolio is required.

Pre-reqs:

IMT263

CIS223 IT PROJECT MANAGEMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will be involved in the design, development, and management of various IT projects. Using these hands-on labs, students will develop a competency and professionalism in IT project management including the necessary business knowledge, interpersonal skills, and project management skills required to successfully manage IT projects. Topics in this course incorporate universal project management principles, and include important skills such as conflict resolution, negotiation, communicating, team building/leadership, and setting and managing expectations. Upon completion, students will have skills to explore the greater detail various project management tools, such as scheduler, spreadsheets, and databases. This course helps prepare students for the Comp TIA IT Project+ certification test.

Pre-reqs:

ITD122

Health and Human Services

Physical Therapy

Health and Human Services

Physical Therapy

PTA225 PTA PROCEDURES II NEURO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected cardiovascular, integumentary, neurological, developmental, and traumatic conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

And PTA125

Fire and EMS

EMS223 PARAMEDIC II CLINICAL

Credit Hours: 2 Contact Hours: 12 Lecture Hours: 0 Lab Hours: 12 Other Hours: 0

This course is a co-requisite to Paramedic II, EMS221. It consists of the clinical and infield internship component related to the course content and skills completed in lab sessions during Paramedic II. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

And EMS124

Business/ Entrepreneurial

Automotive

AUT256 AUTO AFTERMKT VEH POWERTRN MOD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course provides students with the preparatory experience required to perform vehicle powertrain modifications. Students will be exposed to current automotive aftermarket industry standards. Attention to detail is reinforced throughout student projects. This course concentrates on the modification of engine volumetric efficiency, final drive ratios, transmission shifting controls, fuel management systems, engine and transmission cooling devices, exhaust systems, and under-hood visual appeal through the application of automotive aftermarket accessories and practices.

Pre-reqs:

AUT123

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ARL236 ADV CYLINDER HYDROTESTING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course builds on the knowledge and skills taught in the cylinder hydrotest course to show students how to troubleshoot more advanced applications of cylinder testing processes. The course will further explore hydrotesting equipment, resolving advanced issues. Students will learn how to identify and resolve advanced leakage issues that may arise. They will also learn procedures and processes for additional testing processes using helium gasses in rotary cylinders.

Pre-reqs:

ARL144

Educ/ Liberal Arts/ Math

Criminal Justice

CJS140 LAW ENFORCEMENT ACADEMY I

Credit Hours: 8 Contact Hours: 14 Lecture Hours: 5 Lab Hours: 9 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum. The course provides an overview of the American criminal justice system and focuses on Ohio criminal law, criminal procedure for the law enforcement professional, general and investigative report writing, law enforcement driving techniques, and physical conditioning.

Pre-reqs:

IDS102

Information Tech

Computer Security

IMT265 MOTION GRAPHICS PORTFOLIO

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This capstone course will focus on developing and completing complex production projects and a portfolio. These projects are used to assess the student's competencies and proficiencies acquired in the program. A portfolio is required.

Pre-reqs:

IMT268

Information Tech

Computer Security

IMT266 FILM THEORY AND PRACTICE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course will evaluate and dissect film from historical pictures to the modern day 3-D films. The course also covers the ideology and technology of film throughout history until the present day It allows critical thinking about how and why the film was made in addition to practicing those techniques and replicating them using today's post-processing software. Students will reconstruct the films that they study using today's technology.

Pre-reqs:

IMT121

Educ/ Liberal Arts/ Math

Mathematics

MTH135A PRECALCULUS A

Credit Hours: 2.5 Contact Hours: 2.5 Lecture Hours: 2.5 Lab Hours: 0 Other Hours: 0

Study of linear and quadratic equations, and their applications; solving rational and radical and radical equations; complex numbers; linear, polynomial and rational inequalities; equations and inequalities involving absolute value; graphs of equations; relations and functions; transformation of functions; combining functions and composite functions; inverse functions; exponential and logarithmic functions and equations; the conic sections; sequences and series.

Pre-reqs:

MTH093

Or Test & Score: Compass Algebra - 054

Engineering Tech

Engineering/Applied

MST134 HYDRAULIC AND PNEUMATIC SYS

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course is a combination of MST122 and MST123 and is the study of fluids, their properties, behaviors and applications. Topics include: basic hydraulic and pneumatic pumps, actuators, valves, piping, hydraulic and pneumatic applications, the various types of hydraulic and pneumatic circuits, and how to troubleshoot these circuits.

Pre-reqs:

Or MTH103 Can be Taken Concurrently

Health and Human Services

Dietary Management

Health and Human Services

Dietary Management

DTR227 FOODSERVICE OPERATIONS I

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This is the first course that introduces the scientific and nutritional principles involved in food preparation including ingredient function, food composition, nutritional quality, terminology, equipment usage, preparation techniques and product evaluation. Quantity food production techniques and principles are introduced. Kitchen design and equipment selection is introduced in terms of usage with products. This course includes a lab section which includes menu costing and preparation, tools, and equipment used in quantity food preparation, 'Mise en place', basic principles of cooking, knife skills, stocks and soups, sauces, principles of all meat, poultry and fish cooking, and vegetables. Fruits, principles of bake shop, yeast breads, and plate presentation are also introduced. Students will also learn healthy cooking principles as required by the dietary guidelines, recipe and menu modification, allergies and understanding of altered textures and buffet presentation of quantity foods.

Pre-reqs:

And DMA121 Can be Taken Concurrently

DTR228 DIETARY SYSTEMS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Comprehensive systems approach of how to manage foodservice and dietary operations, efficiently and effectively, as they relate to the role and interactions of all departments involved in the total organization of a facility. The foodservice systems model is used as a guide to show managers how to transform all of the systems into outputs of meals, customer satisfaction, employee satisfaction and financial accountability. Additional coverage of sustainability, social responsibility and globalization related to dietary services is incorporated into the course materials.

Pre-reqs:

DTR227 Can be Taken Concurrently

Massage Therapy

MAS124 MASSAGE THERAPY A & P II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

General study of Anatomy and Physiology with an emphasis on massage specific information. Eleven basic systems will be studied and correlated with specific disorders. These disorders will be discussed relative to how they would affect the work of a massage therapist. Treatment of the disorders will also be discussed

Pre-reqs:

MAS123

Health and Human Services

Massage Therapy

MAS226 MASSAGE THERAPY V

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course, students will examine various Massage Therapy Practices in the clinical setting. Massage procedures from various disciplines will be used in the study of treatment of systemic and musculoskeletal dysfunctions. This course also provides a licensing exam review for Massage Therapy as a Limited Medical Practice in the State of Ohio.

Pre-reqs:

MAS124

Occupational Therapy

OTA222 DEV CLINICAL EXPERIENCE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 2 Other Hours: 1

Training of transfer techniques, range of motion, inhibition and facilitating techniques. Training in the use of self-maintenance skills and assistive devices. Supervised work experience in a school, hospital or workshop servicing clients with developmental disabilities.

Pre-reqs:

And OTA124

Engineering Tech

Engineering/Applied

IET270 DIM METROLOGY AND INSPECT I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an in-depth study of measuring principles, instruments, and techniques. The measuring instruments most commonly used in industry, including coordinate measuring machines, are covered. Emphasis is placed on proper use of equipment in terms of prevention and minimization.

Pre-reqs:

Or Test & Score: ACT Math - 20

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT126 AUTO HVAC SYSTEMS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed to give students a sound knowledge of the theory and repair of modern automotive heating and air conditioning systems (HVAC). Before taking this course, the student should have a basic knowledge of automotive fundamentals and electrical equipment, and experience with common shop tools and techniques. Topics include: heat transfer, heating and cooling cycles, air flow management and component identification. System diagnosis, servicing, and repair techniques are demonstrated by the instructor, and lab sessions will enable the students to apply these concepts and procedures to vehicles fitted with the various manufacturers' systems. Laboratory exercises will include recovery and recycling operations required for R-12 and R134a. Special emphasis is placed on the safety aspects related to heating and air conditioning service.

Pre-reqs:

AUT121	Can be Taken Concurrently

AUT175 HONDA ELECTRICAL SYSTEMS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers Honda-specific diagnostic and repair techniques necessary to service Honda automotive electrical systems. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper inspection and repair procedures related to Honda automotive electrical systems. Hands-on practice will enable the students to apply these concepts to Honda vehicles. Special emphasis is placed on the safety aspects related to automotive electrical service.

Pre-reqs:

AUT125	Can be Taken Concurrently

Health and Human Services

Dietary Management

DMA121 SERVSAFE

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course provides 16 instruction hours on food safety training and certification, using the ServSafe program created by the National Restaurant Association Educational Foundation (NRAEF). This comprehensive course includes updates from the FDA Food Code, as well as new science-based and industry best practices relevant to state and local laws. There is a focus on the control of microorganisms, contamination, food allergens, food borne illness, and the safe food handler. ServSafe follows the flow of food from purchasing through service. This course also presents (Hazard Analysis of Critical Control Points) HACCP recipes, procedures and protocols. This course also includes food security, crisis management, and the active managerial program control. A ServSafe Food Protection Manager certificate and Ohio Department of Health ServSafe card is provided to students who pass the NRAEF certification exam.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV225 SOLID AND HAZ WASTE SMPLG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the methods and procedures of managing solid and hazardous wastes according to applicable federal regulations such as the Resource Conservation and Recovery Act. Included will be the study of physical facilities and operational standards of sites that treat, store and dispose of solid and hazardous wastes. Case studies will be used to determine the methodologies of waste stream audits, pollution prevention, permitting and land ban determination.

Pre-reqs:

Or CHM141

ENV224 AIR SAMPLING-ANA & CONTR

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will review the standard methods of air sampling for gases and particulate matter. Students will learn proper monitoring equipment selection, operation and maintenance. Laboratory experience will emphasize sampling techniques, data collection and proper reporting methods. A broad overview of all aspects of air pollution will be included.

Pre-reqs:

CHM121

Sciences

Physics

PHY101 PRINCIPLES OF PHYSICS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Survey course that assumes no familiarity with physics. Space, time, matter, motion, force, momentum, mechanical energy, heat, electricity, magnetism, light, units of measure and other concepts are studied descriptively. Basic calculation and problem-solving techniques are introduced, including a brief review of elementary algebra. Laboratory work emphasizes how to read measuring instruments, proper use of measured data in calculations, and how measured data can be used to test theories of physics. TMNS Approved effective Autumn 2008.

Pre-reqs:

And IDS102

Health and Human Services

Dietary Management

Health and Human Services

Dietary Management

DMA123 NUTRITION MED NUTRITION THER

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides foundation knowledge of basic nutrition, plus extensive coverage of medical nutrition therapy. A sampling of the topics covered in this couse include dysphasia, nutritional supplements, trans-fatty acids, medical diets, diabetic meal planning and carbohydrate counting, liberalization of diets in long-term care, Centers for Medicare & Medicaid Services (CMS) regulations, laboratory values and nutrition facts labeling, as well as many other critical care conditions..

Pre-reqs:

DMA125 MFS OPER FOR DIETARY MGRS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is the study of food service systems management, including menu planning and evaluation, recipe development, purchasing, equipment, financial management, inventory controls and marketing. Applications of the management principles in food production, quality control, distribution and the physical facilities are studied.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

SOC230 Applied Sociological Methods

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce students to basic sociological research, and test their proficiency in applying theory, research methodologies, and data analysis. The course begins with a brief synopsis of sociological theories and perspectives that can be used to identify and frame social problems and issues. A variety of quantitative and qualitative research methods will be introduced, and a number of statistical analytic techniques will be presented as options for consideration in data analysis. Throughout the course, students will be expected to isolate a problem or issue amenable to sociological analysis and develop a research project in order to demonstrate proficiency in applied sociological research.

Pre-reqs:

And SOC221

And SOC228

And MTH222

Health and Human Services

Respiratory Therapy/MIST

Health and Human Services

Respiratory Therapy/MIST

MIS223 MIS III/Directed Practice

Credit Hours: 1 Contact Hours: 5 Lecture Hours: 0 Lab Hours: 5 Other Hours: 0

This course reinforces the technical competency skills in decontamination, assembly, sterilization, distribution and storage. Students will demonstrate competency by working more independently in the central service processing area in a hospital/surgery center.

Pre-reqs:

MIS127

Medical Assisting

MAT235 PHLEBOTOMY TECH PRACTICUM

Credit Hours: 1 Contact Hours: 7 Lecture Hours: 0 Lab Hours: 7 Other Hours: 0

Students will have a supervised non-paid practicum at a health care facility which is designed to allow the student to gain experience in drawing blood on actual patients. The student works under the close observation and supervision of the clinical site supervisor; students will complete a daily journal while at their practicum.

Pre-reqs:

MAT234

Educ/ Liberal Arts/ Math

Mathematics

MTH108 Explorations in Modern Mathema

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce the student to the beauty and utility of mathematics in everyday life. The student will be able to reason critically, think creatively, assess evidence from conclusions, and use skills in abstract and quantitative thinking. Topics covered in this course will be: Thinking critically, numbers in the real world (percentages and index numbers), managing your money, statistical reasoning, describe statistical data using measures of center and spread, statistical inference, the normal distribution, solve basic probability applications, mathematics and business.

Pre-reqs:

Or MTH100

Educ/ Liberal Arts/ Math

Mathematics

MTH093 Intermediate Algebra I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline, but especially for those that will eventually pursue a Bachelor's degree. Topics to be covered are linear graphing; solving inequalities and absolute value equations; an introduction to functions; systems of equations; exponents; and polynomials.

Pre-reqs:

Or MTH101

Sciences

Physics

PHY125 ASTRONOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This class is a study of fundamentals of astronomy. Topics include: the solar system, planets, stars, galaxies, and the universe. This course is a comprehensive survey of astronomy designed primarily for the non-science major. Pivotal discoveries discussed in class are reinforced through lab activities that replicate topic-related studies. This course should provide the student with an understanding of the nature of the universe and insight into the scientific fields that provide the evidentiary basis for modern cosmological theories.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Business/ Entrepreneurial

Business Mgt/Entrep

CUL120 Sanitation and Safety

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course prepares the student to use a Food Protection Certification. The training will cover the concepts of: food safety and handling, good personal hygiene, time and temperature control, prevention of cross contamination, cleaning and sanitizing, safe food preparation, receiving and storing of food, methods of food handling, HACCP, food safety regulations and food borne illness with emphasis on application in a professional kitchen.

Pre-reqs:

Automotive

Business/ Entrepreneurial

Automotive

AUT251 AUTOMOTIVE DRIVETRAINS I

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed for Toyota dealership technicians and students that desire to become Toyota dealership technicians. The purpose of this course is to give the student a sound knowledge of the operation of Toyota manual transmission and driveline systems. The course is divided into four sections:(1) Clutches and Flywheels;(2) Manual Transmissions(3) Final Drive Assemblies; and(4) Transfer Cases. The student will study the theory of operation of components in these four sections. Included in the course is student laboratory experience in the(a) identification and diagnosis;(b) dismantling and repair; and (c) reassembly and adjustment of all components used in modern manual transmission systems. The instructor will demonstrate Toyota manual transmission diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to Toyota vehicles. The student will be required to complete 2hrs of out-of-class assignments and answer review questions.

Pre-reqs:

AUT339 ACDELCO ADV REFRIGERANT DIAG

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Building upon the technician's knowledge obtained in the related ACDelco HVAC web courses, this all-makes, instructor led course utilizes class discussion and hands on lab experience to improve the student's diagnostic skills on the following types of automotive refrigerant systems: Cycling Clutch orifice Tube (CCOT), Variable Displacement Thermostatic Expansion Valve (VDTXV), Cycling Clutch Thermostatic Expansion Valve (CCTXV), Variable Displacement Orifice Tube (VDOT). An overview of: hybrid vehicle refrigerant systems, interpreting refrigerant gauge readings, refrigerant oil and sealant types, refrigerant type detection and sealants, system flushing, leak detection, and, refrigerant legislation is also presented with this course.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV169 RADIATION SAFETY

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course provides the student with both classroom and applied training. Students are introduced to basic atomic structure and the process of ionization. Classroom topics include: the four basic types of radiation, units of measurement (roentgen, rad, rem, curie and SI units), the sources of radiation, biological effects, dosimetry, ALARA, contamination control, radiological emergencies, radiological postings plus administrative and engineering controls. Applied training consists of hands on training. Students learn and demonstrate how to: don and doff radiological personal protective equipment, use survey instruments and dosimetry to measure radiation. Students also learn proper radiological decontamination procedures for both contaminated personnel and equipment. The course is based on the requirements of the Code of Federal Regulations 10 CFR 835 for Department of Energy radiological workers. A certificate of completion as a Radiation Worker II is provided to the student after the successful completion of the course with a score of 80% or above on a comprehensive final examination.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KMTH999 Math and Critical Reasoning

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV165 OSHA 10 HR CONSTRUCTION SAFETY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 0 Lab Hours: 1 Other Hours: 0

This safety course meets the requirements of the Occupational Safety and Health Administration (OSHA) 10-Hour training requirement for the construction industry. Students are made aware (general overview) of the most common hazards encountered on construction sites and are taught methods (related safety guidelines) to avoid them. Students are introduced to OSHA standards and requirements as they pertain to the construction industry in accordance with 29 CFR 1926. Students that attend the required time and pass a final examination receive an OSHA 10-Hour Construction Safety Card issued by an OSHA authorized instructor. TAG approved course ORE004, effective Summer 2013. CTAG approved course CTS001, effective Summer 2013.

Pre-reqs:

Mathematics

Mathematics

MTH091 Prealgebra I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline. Topics to be covered are whole numbers; fractions; the Real Number System; an introduction to variables; and solving equations.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT291 Electrical/Elecc Cert Assmt

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is designed to teach the students the skills necessary to work with electrical and electronic systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing electrical terminals and connectors by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in the course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV144 BASIC WATER TRMT-IRON & MANG

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of water treatment. The topics of this course include general issues operators face when dealing with iron and manganese levels. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS126 DEFENSIVE DRIVING

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on defensive driving. Specific topics include non-emergency driving, emergency driving, pursuit driving, and practical driving events. CTAG approved Spring 2012 CTBPO.

Pre-reqs:

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KENG220 Great Books I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

IRT131 LEGAL TERMINOLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Instruction in legal terminology in civil law; criminal; and the discovery, trial, and appellate processes. Upon completion, students should be able to comprehend, appreciate, and use legal terms.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT249 DIESEL ENGINE PERFORMANCE

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course focuses on the Duramax 6.6L diesel engine operation and performance, major subsystem integration, and proper diagnosis of diesel engine conditions. Specific systems covered are the fuel systems and electronic engine controls.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT235 LEGAL RESEARCH AND WRITING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the basics of legal writing, document drafting skills and legal research strategies used in assisting lawyers in the preparation of legal documents.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT209 ACDELCO GM SUPPLMNTL RESTRNTS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (CBT) related to supplemental inflatable restraint systems (SIR). Intended for experienced ACDelco TSS technicians, the students will gain skill and knowledge concerning SIR components and systems. Emphasis is placed on diagnostic practices, SIR diagnostic equipment, correct service procedures, and safety concerns. The instructor will demonstrate SIR diagnosis and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS352 Studio Ensemble

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Arts, Humanities & Rdg

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

HIS122 US HISTORY II FROM 1877

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the major trends and ideas in American history from the end of Reconstruction to the present. The economic, social, political and religious beliefs and issues affecting the growth and development of the American nation will be examined. Topics discussed will include Industrialization, Immigration, Suffrage, the Great Depression, World War II, the Cold War, Vietnam, the youth movement of the 1960s, Watergate, the Reagan Era, and the United States in the 21st Century.

Pre-reqs:

Social Sciences

KHIS120 U.S. Modern Period

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

KSCI9990 Basic Sciences

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Information Tech

Computer Security

Information Tech

Computer Security

HLS123 HOMELD DEF AND CRISIS MGT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide students with an introduction to crisis management techniques, principles, and strategies preparing them to manage and even prevent crises in the homeland defense realm. Students will be able to identify potential crises and vulnerabilities; establish the procedure to follow in case of a crisis; elect and prepare a response team; and set up organizational channels to facilitate early warnings.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT201 AC DELCO DURAMAXX 6600 DIESEL

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is intended for experienced engine/driveability service technicians and focuses on the Duramax 6.6L diesel engine operation, performance and major sub-system integration. Specific systems covered are the fuel system and electronic engine controls. This course builds on what is learned in the web courses. The instructor will demonstrate Duramax 6600 engine/fuel system diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Health and Human Services

Human Services

SWK127 GROUP PROCESSES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Group theory, structure and interaction are explored, with emphasis on personal insight into how the individual is affected by and influences the group process. Facilitation of team-building, group life stages and factors that impede/enhance group effectiveness are examined. An experiential format requires application of course principles to group activities.

Pre-reqs:

Engineering Tech

Engineering

Engineering Tech

Engineering

EET143 LGHT DES, APP AND ELEC ELEM II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course complements Lighting Design, Application and Electrical Elements I. Topics included are advanced lighting design techniques, including hands-on computer studies and in-depth application workshops within the following areas: industrial lighting, exterior lighting, office and educational facility lighting, public building lighting, merchandise and store lighting, along with special applications such as houses of worship, museums, and recreational areas. Also included are sessions on visual performance, in-depth color evaluation, psychological effects of lighting, lighting for improving productivity, safety and security lighting, lighting economics, and energy-saving techniques, calculations, and evaluations, with guidelines for ASHRAE 90. 1-2001.

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

IDS115 COLLEGE SUCCESS SKILLS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Designed to aid students in gaining success skills needed for constructive and efficient learning both in college and other life settings. Topics include time management, study and test-taking skills, library use, and a variety of techniques for academic, professional and personal use.

Pre-reqs:

Sciences

Biology

BIO125 MEDICAL TERMINOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An introduction to medical word structure, including prefixes, suffixes, roots, plurals and abbreviations. Spelling, definitions and pronunciation are stressed and reinforced by frequent examination. TAG approved course- OHL020 effective Fall 2005.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT286 GM MANUAL DRVTRAIN AND AXLE

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the students the skills necessary to work with manual drivetrain and axle systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing manual drivetrain and axle systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in the course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

HIS221 World Civ to 17th Century

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will look at world history from early human societies through the mid-17th century.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL143 COMPRESSOR COATING PROCESSES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course instructs students in the processes, procedures, and techniques for coating compressors in the production environment. There is a review of safety procedures for working with paint, pigments, thinning agents and industrial painting equipment. Students will learn fundamentals of how to operate automatic coating equipment used in paint booths. Manual coating processes and techniques will also be addressed.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV134 WASTEWATER COLLECTION SYSTEMS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Using the internet, students will gain a working knowledge of wastewater collection systems safety procedures, sewer inspection and testing, pipeline cleaning and maintenance, underground repair, lift stations, equipment maintenance, and sewer rehabilitation. Along with reading assignments from the text, the course is enhanced with up-to- date photographs, audio, interactive exercises, and links. This is a 100% web-based course.

Pre-reqs:

Information Tech

Computer Security

NET121 INTRO TO COMP NETWORKING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Fundamentals of networking, which includes sharing computer resources, protocols, cables and adapters, E-mail, network, inter-operability and management is covered. Various network products are described and compared.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMTH999 Math and Critical Reasoning

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV152 WTR DISTRIBUTION SYS-SYS SAFEY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The specific topic of this course is that of safety issues confronting water distribution systems. Along with reading assignments from the test, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KENG230 Major Modern Writers

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Mathematics

ARL127 INDUSTRIAL MATHEMATICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course reviews the fundamentals of math used in the machining industry. Practical application will be made using blueprints, precision measuring tools, and practical formulas used in machine trades. Powers and roots will be explained in conjunction with volumes and areas of geometric figures and how (¿) figures into many of these formulas. Percentage applications will also be explained. Introductory Algebra beginning with symbolisms, sign numbers, algebraic operations of addition, subtraction, multiplication, division, powers and roots will follow. Equations and rearranging practical formulas will complete this level.

Pre-reqs:

Information Tech

Computer Security

Information Tech

Computer Security

IMT121 INTERACTIVE MEDIA

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Topics include communication through design, sketching and visualization, the use of computers and human-computer interaction. Human-computer interaction is explored through a survey of web, audio, video, and design projects.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL123 CNC GRINDING OPERATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This Computer Numerical Control course has been designed to help students read, understand and develop the confidence to edit the various programming formats used in standard EIA/ISO, Conversational and Macro types of programming used in various grinding operations. The students will be given the opportunity to apply the information learned from the lecture portion of the course on the grinders available to enter the various Ariel styles of programs into the machine tool control and to develop the ability for the various aspects of OD grinding.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS120 INTRO TO LAW ENFORCEMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and provides an overview of the American Criminal Justice system. Topics include the role of the peace officer, the court structure, ethics and professionalism, community policing, communicating with the public and the media, legal aspects of interviewing and interrogation, testifying in court and rules of evidence, the juvenile justice system, civil liability and use of force, and theories of criminal behavior.

Pre-reqs:

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KARF140 Drawing 1

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

KHUM99 Humanities Core Course

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

HVC231 HVAC MOTORS AND COMPRESSORS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Motors and compressor types, designs, applications, and failure modes are studied. Heavy emphasis is placed on failure symptoms, causes and resolution. Actual failed motors and compressors are examined and probable causes and remedies determined.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KARF999 Fine Arts Core Course

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV232 ASBESTOS ABATEMENT WKR INTIAL

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course provides 16 hours of asbestos abatement worker refresher training in which students will review the various types of asbestos and will be provided updates on federal and state regulations pertaining to the removal of asbestos. Students will review proper asbestos removal procedures from ceilings, walls and pipes and how to set up a containment area that will protect the public from asbestos exposures during abatement activities. Students will review self-protection methods from asbestos hazards by the use of respirators, personal protective clothing and HEPA asbestos filtration units. Upon initial and continued approval by the Ohio Department of Health this course will provide the training requirements established by the Ohio Department of Health and the United States EPA to continue to be a licensed asbestos abatement worker in the state of Ohio. Upon successful completion of the course which includes a comprehensive examination, a certificate of completion will be provided to the student

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

IDS101 TECHNICAL COMPREHENSION

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course helps students develop and apply reading, vocabulary, study and critical thinking skills to enhance their success with college-level work. This course requires a computerized reading software program.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV150 WATR DISTRBN SYS-SYS DISINFCTN

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The specific topic of this course is that of water disinfection systems. Along with reading assignments from the text, the coures is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Sciences

Biology

BST130 BIOTECHNOLOGY SEMINAR I

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

A seminar course presented in a "journal-club" format. Students will read and discuss articles covering the latest techniques and trends used in the biotechnology industry. Guest speakers will be invited to present overviews of their work to the group.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV153 WTR DISTRBN SYS-VALVES,MAIN ME

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The specific topics of this course are that of proper maintenance operations of the values, and meters found in water distribution systems. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Engineering Tech

Engineering/Applied

MST225 DC CRANE CONTROL

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers basic DC crane control including operator controls, DC motors, and relay control with an emphasis on maintenance troubleshooting using blueprints and schematics.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT194 Automotive Co-op 4

Credit Hours: 2 Contact Hours: 24 Lecture Hours: 0 Lab Hours: 24 Other Hours: 0

Cooperative work experience opportunities are available to students enrolled in Automotive Department programs. Students may contact the Automotive Department Programs Coordinator for specific information regarding co-op opportunities. During this course, students will gain practical work experience by diagnosing and repairing engine drivability concerns, advanced electrical concerns, and diagnosing and repairing automatic transmission faults. Under special circumstances, sponsoring automotive repair facility and the instructor can determine specific tasks to be performed during the co-op.

Pre-reqs:

Engineering Tech

Engineering/Applied

AIT138 ROOT CAUSE ANALYSIS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course outlines a structured approach to identifying the factors that resulted in the nature, magnitude, location, and timing of harmful outcomes (consequences) of one or more past events. Root Cause Analysis identifies what behaviors, actions, inactions, or conditions that need to be changed to prevent recurrence of similar harmful outcomes and to identify the lessons learned to promote the achievement of more desirable outcomes or consequences. This course identifies and applies the major tools needed to achieve positive results.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV157 WASTEWATER TRTMT-FIXED FILM PR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of wasterwater treatment. The topics of this course include general issues regarding the trickling filter process when treating wastewater. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT244 ALLISON LCT 1000 AUTO TRANS DI

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course allows the students to develop the knowledge and skills needed to properly diagnose the Allison LCT 1000 Transmission conditions related to the TCM and PCM. Emphasis will be placed on recognizing normal operating parameters. Students will also perform mechanical disassembly and reassembly procedures as well as critical measurements for in-depth understanding of the ALLISON LCT 1000 Transmission.

Pre-reqs:

Engineering Tech

Automotive

ETD204 ENG INDEPENDENT STUDY

Credit Hours: 4 Contact Hours: 40 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Engineering Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Engineering Technology will determine course content, meeting schedules and credit hours.

Pre-reqs:

Engineering/Applied

Engineering Tech

Engineering/Applied

ARL231 COMPRESSOR FINAL INSPECTION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the final inspection process which is performed before a compressor is certified as ready to be delivered. Students will learn the final inspection process and evaluate compressors in the key inspection areas including clearances, alignment, and component balancing. Students who complete this course will be capable of executing a final inspection of any compressor.

Pre-reqs:

Educ/ Liberal Arts/ Math

Education

ASL123 INTRODUCTION TO INTERPRETING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to the philosophy of interpreting, history and models of interpreting; ethical issues; physical, social and psychological factors. Five observation hours are required.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT192 Automotive Co-op 2

Credit Hours: 2 Contact Hours: 24 Lecture Hours: 0 Lab Hours: 24 Other Hours: 0

Cooperative work experience opportunities are available to students enrolled in Automotive Department programs. Students may contact the Automotive Department Programs Coordinator for specific information regarding co-op opportunities. During this course, students will gain practical work experience by working on steering, suspension, and braking systems. Students will also be expected to perform battery, starting and charging system testing and repair, as well as engine mechanical diagnosis and repairs. Under special circumstances, sponsoring automotive repair facility and the instructor can determine specific tasks to be performed during the co-op.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ARL132 CNC TURNING CTR PRG-CONV FRMT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This Computer Numerical Control course provides the core knowledge to read, understand, and edit the various programming formats used in standard Conversational, Mazatrol, and Macro types of programming used in turning center operations. With assigned lab projects, the student will reinforce the concepts covered.

Pre-reqs:

AET121 SUSTAINABLE/AET SOURCES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to alternate/sustainable energy sources such as solar, wind power, geothermal, hydroelectric, bio-energy and fuel cells. The course addresses solar topics such as efficiency of photovoltaic cells, both tracking and stationary solar arrays; wind power topics such as where to install wind farms; geothermal power topics such as how to take advantage of the earth's core temperatures to efficiently heat and cool a facility; hydroelectric and micro-hydroelectric power topics such as generation and distribution of power to customers; bio-energy topics such as biomass to energy and algae generation of petroleum products and hydrogen gasses; and fuel cell topics such as components(anode, cathode, electrolyte), fuels (hydrogen and hydrocarbons), and types of fuel cells (polymer electrolyte membrane, solid oxide, alkali, phosphoric, molten carbonate).

Pre-reqs:

MST125 BASIC PUMPS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the centrifugal, propeller, turbine, rotary, reciprocating, metering and special purpose pumps. Pump applications, selection and routine maintenance are also reviewed, along with various types of packings and seals that are used.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV151 WTR DISTBN SYS-SYSTEM O M

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will obtain a working knowledge of potable water distribution systems. The specific topic of this course is that of the needs for proper operations and maintenance of water distribution systems. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KARF140 Sculpture II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Arts, Humanities & Rdg

PHL122 ETHICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Uses historical and contemporary theories to examine the role and application of ethics to a variety of personal and professional modern-day situations. TAG approved course- OAH046 effective until Spring 2008. TMAH Approved effective Autumn 2008.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT101 ALPHANUMERIC KEYBOARDING

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the working knowledge and basic skills of alphanumeric touch keyboarding. No prior knowledge of keyboarding is required. Upon completion, students should be able to use the proper techniques for alphanumeric keyboarding.

Pre-reqs:

Engineering Tech

Engineering

CET123 ARCHITECTURAL DRAFT II

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course concentrates on the preparation of building details and sections. Emphasis will be placed upon the design of details and their synthesis into a final graphic product.

Pre-reqs:

And CET121 Can be Taken Concurrently

MET222 FLUID POWER

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The study of the subjects essential to understanding the design, analysis, operation and application of fluid power systems is the focus of this course. Theoretical principles will be used to develop an understanding of hydrostatics and hydrodynamics. Teamwork skills will be reinforced through hands-on experimentation and written presentation of results. Students will submit formal reports in a format that requires the use of word processing and spreadsheet software. TAG approved course - OET009 effective Summer 2008.

Pre-reqs:

MET124

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

MKT222 ADVERTISING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Provides an overview of the field of advertising, including its place in marketing, media considerations, design principles, budgeting and planning. Included is a project consisting of the design of a total campaign. Upon completion, students should be able to demonstrate an understanding of the field of advertising. OCM002 TAG approved Spring 2012.

Pre-reqs:

MKT121

Engineering Tech

Engineering

EET230 ELECTRONIC CIRCUITS I

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

A study of semiconductors, field effect transistors, h-parameters, device equivalent circuits, small signal analysis, multistage amplification, decibels, frequency analysis, large signal amplifiers, thyristors, power amplifier design, differential amplifiers, operational amplifiers, feedback and oscillator circuits, electronically regulated power supplies, and applications of circuits with these devices. TAG approved course- OET005 effective Sspring 2008.

Pre-reqs:

EET123

Health and Human Services

Occupational Therapy

OTA228 CLINICAL APPLICATIONS II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Supervised field work placement designed to provide in-depth experience and responsibility for delivery of services to patients/clients. Emphasizes the application of academically-acquired knowledge leading to the performance level expected of an entry-level occupational therapy assistant.

Pre-reqs:

And OTA226 Can be Taken Concurrently

Physical Therapy

Health and Human Services

Physical Therapy

PTA125 PROF CLIN PRACT FOR PTA

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course will focus on development of the professional clinical skills including critical thinking and clinical decision-making. The students will apply didactic concepts learned in Fundamentals of Physical Therapy and PTA Procedures I to clinical situations.

Pre-reqs:

PTA123

Engineering Tech

Engineering

EET129 OPTICS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is complementary physics for students in Electrical/Electronic Technology and related fields of study. Topics include: the physical nature of light, optics, lasers, optics and their relation to the electronic field and fiber optics.

Pre-reqs:

PHY121

EET231 ELECTRONIC CIRCUITS II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A study of power amplifier design, heat sinking, differential amplifiers, operational amplifiers, IC fundamentals, feedback and oscillator circuits.

Pre-reqs:

EET230

Engineering Tech

Engineering

EET235 TECH PROJECT ELECTRONIC

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

Designed to allow the student to exercise the capabilities developed in the Electronic Engineering Technology program. The student will choose an approved project compatible with interest and background. Project may be a design, test or microcomputer-based project. During the project, performance will be verified at given intervals with suitable test procedures.

Pre-reqs:

EET125

EET262 PULSE AND DIGITL INTEGRATD CIR

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course is a study of pulse terminology, number systems and codes, TTL and CMOS IC logic circuits and interfacing, Boolean Algebra and logic simplifications, integrated arithmetic circuits, counter, register, encoders, decoders, multiplexers, and demultiplexers, display devices, IC flip-flops, hardware minimization techniques are also covered in conjunction with logic circuit design. TAG approved OET002 effective Summer 2009. CTAG CTEET002 approved Spring 2012.

Pre-reqs:

Or ECA222

Engineering/Applied

EUT122 OVERHEAD LINE TECHNOLOGY II

Credit Hours: 6 Contact Hours: 10 Lecture Hours: 2 Lab Hours: 8 Other Hours: 0

Provides the knowledge to safely and properly install three phase primary conductors; to operate transmission line installation equipment; to safely install and operate line fuses, reclosers, transformer power banks, capacitors and line voltage regulators; to identify, install and maintain underground residential distribution secondary equipment. The safe and proper methods to install box pads, single-phase transformers, primary elbows and terminators, and safety requirements will be included throughout the course of instruction.

Pre-reqs:

EUT121

Health and Human Services

Health Information

Health and Human Services

Health Information

HIT124 CLINICAL CLASSIFICATNS SYS I

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

ICD coding systems and the professional standards for coding and reporting diagnostic inpatient and outpatient services and inpatient procedure services; coding characteristics, conventions and guidelines will be applied in identifying and accurately assigning codes; manual and electronic applications and coding references will be utilized in the coding process; study of various nomenclature and classification systems used in the healthcare field.

Pre-reqs:

Or BIO123

HIT222 HLTHCRE STATSTICS AND RESEARCH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Collection, organization, analysis and presentation of healthcare data; vital and public health statistics; computation and interpretation of healthcare statistics; data retrieval of clinical information from specialized databases; abstracting and maintaining data; importance of data quality and validity; reviewing Institutional Review Board processes.

Pre-reqs:

And HIT124

Business/ Entrepreneurial

Accounting/Finance

ACC234 ADVANCED PAYROLL

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is the second course in a two-course sequence on payroll accounting. Emphasis is placed on payroll laws and Federal Acts. Payroll Accounting Systems are discussed in detail. Additional topics include employee versus independent contractor, special pay situations, self-employment, payment of federal payroll taxes, penalties, taxable fringe benefits, supplemental pay, the gross-up of supplemental pay, and the advanced earned income credit. The completion of Federal, State, and Local Payroll Tax Forms will be reviewed and practiced including Form 941, W-2, W-3, 1099, 1096, W-4, W-5, State Unemployment, Bureau of Workers Compensation, State Income Tax Withholding. This course is geared to the Fundamental Payroll Certification and upon completion of this course, the student should be prepared to take the Fundamental Payroll Exam, adminstered by the American Payroll Association.

Pre-reqs:

ACC227

Business/ Entrepreneurial

Accounting/Finance

ACC237 FRAUD EXAMINATION

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers the nature of fraud and the responsibility of management for fraud prevention and detection. Special emphasis is given to the design of internal control systems, the identification of material weaknesses in internal controls and the additional responsibilities imposed on management under the provisions of Sarbanes-Oxley. Upon completion of this course, students should be familiar with the basic concepts of fraud prevention and detection.

Pre-reqs:

ACC133

Sciences

Biology

BST221 CELL AND TISSUE CULTURE

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Cell and tissue culture are two of the most widely used techniques in biotechnology. In this course students will cover the techniques used for maintaining living cells in culture: aseptic technique, counting cells, subculturing, cryopreservation (freezing) and thawing. Students will obtain hands-on training in all techniques listed above. Lecture and discussion sessions will include the techniques mentioned above as well as the following topics:cell culture equipment, contamination, optimization of growth conditions, recombinant DNA transfection and the future of tissue engineering.

Pre-reqs:

BST122

Engineering Tech

Engineering

CET229 SURVEYING III

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

The primary emphasis of this course will be the use of the electronic total station to perform surveying operations. Increased abilities and accuracies of field work, including precision measurement, will be demonstrated and obtained by students in such areas as traversing, horizontal and spiral curve layout, construction staking and data gathering for topographic maps. Appropriate computer software will be used. The student will also experience increased usage of digital levels and automatic data collection along with geodetic survey methods and state plane coordinate systems.

Pre-reqs:

CET228

And ECA122

Engineering Tech

Engineering

CET236 GLOBAL POSITIONING SYS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Introduction to Global Positioning System to determine location on earth in a three dimensional way (latitude, longitude and elevation). Students will practice the use of electronic receivers using radio signals to collect data and process later using computers. The use surveying and topography mapping is also included.

Pre-reqs:

CET227

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

IDS102 CRITICAL ANALYSIS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course teaches vocabulary skills, critical comprehension, and analysis of college-level reading material. The course requires a computerized reading software program.

Pre-reqs:

Or Test & Score: ACT Reading - 14

Engineering Tech

Engineering

DET226 GEOMETRIC DIM AND TOL

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Designed to introduce students to the type of dimensioning that is part of ANSIY14.5M1994 dimensioning standard. General tolerancing methods will be reviewed first, then the geometric characteristics symbols and terms will be discussed. Datums will be defined and modifiers will be identified. The geometric tolerances of form, runout, orientation, profile and location will be analyzed in detail. The GD&T system will then be applied to actual manufacturing drawings. Special attention will be given to the problems that are experienced in industry between design, manufacturing and inspection personnel.

Pre-reqs:

DET124

Engineering Tech

Engineering

DET231 TOOL DESIGN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course covers the design and drawing of production jigs, fixtures, and stamping dies. The emphasis in jig and fixtures is placed on coordination of machine tools and standard component parts, using symbol libraries and AutoCAD to draw the final layout. While in stamping dies, a step-by-step approach is emphasized in drawing the details and assembly of a die including material punches, die sets, strippers, gauges, pilots and presses.

Pre-reqs:

And DET125

Health and Human Services

Dental Hygiene

DHY221 NUTRITION IN DENTISTRY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Basic concepts of nutrition and the effects on general as well as oral health are presented. The role of nutrition in dentistry for disease prevention and health promotion is emphasized. Dietary analysis and counseling methodologies are discussed and practiced.

Pre-reqs:

DHY132

Educ/ Liberal Arts/ Math

English

ENG230 BUSINESS COMMUNICATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides a realistic sampling of varied forms of communication. During the course of the semester, students will write memos, letters, description, and instructions; conduct research; practice conducting simulated business meetings featuring reports and graphic aids; and develop skills in interviewing and resume creation. The importance of working with others is stressed throughout the class. TMEC Approved effective Autumn 2008. OTM approved for TME002 effective Fall 2011.TAG approved Spring 2012 OBU005.

Pre-reqs:

ENG124

Engineering Tech

Engineering

Engineering Tech

Engineering

EET129 OPTICS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is complementary physics for students in Electrical/Electronic Technology and related fields of study. Topics include: the physical nature of light, optics, lasers, optics and their relation to the electronic field and fiber optics.

Pre-reqs:

Or PHY122

Business/ Entrepreneurial

Accounting/Finance

ACC226 ADVANCED ACCOUNTING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers higher level accounting topics including business combinations and consolidations, accounting for partnerships, as well as the fundamentals of government and not-for-profit accounting. Consolidation topics include an understanding of the entries necessary to prepare consolidated financial statements including elimination entries for inter-company sales, loans, asset and inventory transfers and preparation of consolidated statement of cash flows. Topics also include understanding the international business environment. Upon completion of the course, the student should understand the fundamentals of consolidations, partnerships, government and not-for-profit accounting.

Pre-reqs:

ACC222 Can be Taken Concurrently

Health and Human Services

Nursing

NUR224 NURSING SEMINAR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course examines issues related to the role transition from student to entry-level associate degree nurse. Emphasis is placed on student's involvement in exploring issues relevant to practice as a staff nurse.

Pre-reqs:

And NUR223 Can be Taken Concurrently

Medical Assisting

Health and Human Services

Medical Assisting

MAT228 OPHTHALMOLOGY I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Focuses on anatomy and physiology of the eye; disease pathology, including systemic diseases with ocular manifestation; introduction to optics; pharmacology and microbiology; ocular emergencies and medical care; ophthalmic office procedures; medicolegal aspects of care; and preliminary workup for the ophthalmology patient.

Pre-reqs:

MAT121

Educ/ Liberal Arts/ Math

English

ENG238 INTRO TO CREATIVE WRITING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Students will study and practice creative writing by critically analyzing creative writing strategies and experiencing a writing workshop to create their own texts.

Pre-reqs:

ENG124

ENG239 FILM APPRECIATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Film Appreciation will introduce students to the way films are put together and how they transmit story and ideas to an audience. Students will learn about narrative form, film style, genre, etc., as well as film criticism and theory.

Pre-reqs:

ENG124

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

PSY220 SOCIAL PSYCHOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The scientific study of the way in which people's thoughts, feelings and behavior are influenced by their social and cultural environments. This course focuses on such topics as attitude formation, conformity/obedience, group processes, pro-social behavior, interpersonal relationships, aggression and social cognition. TAG OSS016 approved Spring 2012. Ohio Transfer Module Approved Spring 2012 TMSBS.

Pre-reqs:

PSY121

Arts, Humanities & Rdg

COM125 INTRO TO COMMUNICATION THEORY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide students with a survey of the basic elements of communication in a variety of contexts including interpersonal, group, organizational, intercultural, and mass media. Analysis and application of communication theories is emphasized as well as the study of current communication theory research. This course is Ohio TAG approved. OCM001 effective Summer 2008.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Or IDS102

Sciences

Biology

BIO241 GENERAL GENETICS

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

General Genetics uses the principles of Mendelian, molecular, and population genetics to explore the mechanisms of heredity. Topics include: the structure and function of genes, classical genetic transmission, eukaryotic and prokaryotic genetics, gene regulation and control, population genetics, gene mapping, and recombinant DNA technology. Supporting laboratory aligns with lecture topics and includes: basic genetic analysis, experiments in microbial and Drosophila genetics, quantitative and computer simulated analysis of population genetics and molecular genetics techniques. (TMNS, Effective Summer 2013)

Pre-reqs:

BIO141

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

AET124 SUSTAINABLE/ALT ENERGY PROJECT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In coordination with a faculty advisor, the student works on a project to design and build a sustainable alternative energy system by selecting a marketing need (home, industry...), determining components, developing cost justification, documenting design process, creating bill of materials, procuring necessary materials, documenting the methodology, assembling a model, evaluating performance, and presenting the proposal.

Pre-reqs:

AET123

MST138 PREP GAS TUNGSTEN ARC WLDG

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

This lab course will provide the student with a technical understanding of gas tungsten arc welding, arc characteristics and welding safety procedures. In addition, the student will develop skills necessary to weld with pulsed current.

Pre-reqs:

MST127

Educ/ Liberal Arts/ Math

Social Sciences

PSY123 HUMAN GROWTH AND DEVELOP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A study of normal physical, mental, emotional and social development and changes in the development of the individual from prenatal to old age. TMSBS approved Spring 2012. . TAG approved OSS048 effective Spring 2011.

Pre-reqs:

PSY121

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY222 DENTAL PHARMACOLOGY

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

General principles of drug regulation and prescribing, action and handling and adverse reactions is covered. Body systems, medical histories and their impact on drugs used in dentistry and their potential to alter dental treatment is discussed. Drugs used to manage medical emergencies are emphasized.

Pre-reqs:

And DHY126

Sciences

Biology

BIO221 PRINC OF MICROBIOLOGY

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course examines microbial structure and function with particular emphasis on medical microbiology. Content includes taxonomy, identification procedures, microbial growth and control, microbial genetics and the epidemiology of common infectious diseases. The laboratory experiences include staining, culturing and aseptic techniques, as well as various diagnostic procedures. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or BIO141

Physics

PHY221 GEN PHYSICS I W CALC

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

Study of mechanics, heat and thermodynamics, oscillations and sound. Problem solving in orientation, emphasizing the application and derivation of formulas using calculus for physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TAG approved Fall 2012 OSC016.

Pre-reqs:

MTH223

Information Tech

Computer Science

Information Tech

Computer Science

CIS222 DATA ACQUISITION AND ANALYSIS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course is designed to build skills and confidence in data analysis and report writing. A substantial part of this time is spent analyzing data/datasets and producing a report using the techniques learned in the course. Using a workshop type learning atmosphere, the instructor advises participants in the analysis of the datasets and preparation of reports. Topics include frequency distributions, measures, and graphical presentation.

Pre-reqs:

CPD121

WDD223 CONTENT MGT SYS DEV DES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course teaches students to set up, design, and customize various open-source content management systems. In addition, students will be instructed on the various ways to add shopping cart functionality to those systems. Upon completion, students will be able to make customizations to various open-source content management systems.

Pre-reqs:

Or WDD121

WDD231 FLASH ACTIONSCRIPTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on using Flash for web site creation. The student learns to use actionscripting to interact with Flash, load external data and create complex sites using components. Hans-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or WDD124

Sciences

Physics

Sciences

Physics

PHY222 GEN PHYSICS II W CALC

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

Study of electricity, magnetism, light, optics, and modern physics. Problem solving in orientation, emphasizing the application and derivation of formulas using calculus for physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TAG approved Spring 2013 OSC017

Pre-reqs:

And MTH225 Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

AUT125 AUTO ELEC'L AND ACCES SYS

Credit Hours: 4 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This course is designed to give the student an understanding of DC electrical principles including Ohm's Law, basic circuits, semiconductors, automotive wiring and common electrical components. Emphasis will be placed on the maintenance, diagnosis and repair of basic automotive electrical systems including starting and charging systems, electrical motors, switches and relays. Laboratory periods will allow the student to develop proficiency in the use of wiring diagrams, diagnostic flow charts and hands-on techniques utilizing DVOM's and other electrical test instruments. CTAG approved CTAUT002.

Pre-reqs:

AUT121 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

IRT123 SPEEDBUILDING III

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

A required lab for skill development refining techniques necessary for perfecting speed and accuracy in transcription of specialized dictation material. Student will be expected to complete weekly activities, practice realtime/captioning on stenograph machine, and use electronic media and/or realtime transcription technology. This course is designed for self-paced modular instruction. This lab is designed to prepare students to write graduation speed requirements for options in the program: For the Judicial Reporting Option, transcribe a minimum of three five-minute, two-voice testimony tests with a minimum of 95 percent accuracy dictated at a minimum speed of 225 wpm; transcribe a minimum of three five-minute jury charge tests with a minimum of 95 percent accuracy dictated at a minimum of 200 wpm; and transcribe a minimum of three five-minute literary tests with a minimum of 95 percent accuracy dictated at a minimum of 180 wpm; and for the Captioning Option, transcribe a minimum of two five-minute, two-voice, non-realtime tests with a minimum of 96 percent accuracy, dictated at a minimum of 225 wpm; transcribe a minimum of three five-minute literary tests with a minimum of 96 percent verbatim accuracy, dictated at a minimum of 180 wpm; and write three 15-minute literary broadcast material takes at 180 wpm (syllabic and/or word count) at 96 percent verbatim accuracy, following NCRA's "What is an Error?" guidelines. The instructor will grade a random five-minute selection from each 15-minute take. Upon graduation, students should be able to pass the National Court Reporters Association's certification examinations.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

IRT123 SPEEDBUILDING III

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

A required lab for skill development refining techniques necessary for perfecting speed and accuracy in transcription of specialized dictation material. Student will be expected to complete weekly activities, practice realtime/captioning on stenograph machine, and use electronic media and/or realtime transcription technology. This course is designed for self-paced modular instruction. This lab is designed to prepare students to write graduation speed requirements for options in the program: For the Judicial Reporting Option, transcribe a minimum of three five-minute, two-voice testimony tests with a minimum of 95 percent accuracy dictated at a minimum speed of 225 wpm; transcribe a minimum of three five-minute jury charge tests with a minimum of 95 percent accuracy dictated at a minimum of 200 wpm; and transcribe a minimum of three five-minute literary tests with a minimum of 95 percent accuracy dictated at a minimum of 180 wpm; and for the Captioning Option, transcribe a minimum of two five-minute, two-voice, non-realtime tests with a minimum of 96 percent accuracy, dictated at a minimum of 225 wpm; transcribe a minimum of three five-minute literary tests with a minimum of 96 percent verbatim accuracy, dictated at a minimum of 180 wpm; and write three 15-minute literary broadcast material takes at 180 wpm (syllabic and/or word count) at 96 percent verbatim accuracy, following NCRA's "What is an Error?" guidelines. The instructor will grade a random five-minute selection from each 15-minute take. Upon graduation, students should be able to pass the National Court Reporters Association's certification examinations.

Pre-reqs:

IRT130

IRT235 ADVANCED BROADCAST CAPTIONING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to teach students in-depth realtime/caption skills. Topics include how to research specific shows, development and management of specific captioning dictionaries, advanced instruction on captioning style guidelines, utilizing specialized captioning software for reporting in broadcast environments. Upon completion, students should be able to demonstrate realtime/caption production.

Pre-reqs:

IRT230

Computer Security

NET280 WEB SERVER ADMINISTRATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the installation and configuration of the Apache web server and the server handware that supports it. Demonstrations and hands-on practice will reinforce topics such as virtual hosts, authentication, virtual domains, CGI, PHP, and SSL. Upon completion, students will be able to administer the hardware and operating environment of web servers.

Pre-reqs:

Or ECA274

Information Tech

Computer Security

CFS280 DIGITAL MEDIA FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The student will understand the methods and tools used in preserving, duplicating, imaging and validating data from peripheral devices such as cellular phones, PDAs, IPODs, and Blackberrys. In addition to this, attention will be given to the gathering of evidence from both hard wired and wireless networks devices. Students will practice the gathering of information from these devices using the appropriate methods and software to allow the information to be admissible in court.

Pre-reqs:

Or ECA137

Administrative Srv Off Applion

IRT129 SPEED BUILDING I

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

Designed to increase speed, endurance and accuracy for reporting of multi-voice testimony, jury charge, and legal and technical material. A machine speed of 130 wpm is the goal. Emphasis on development of vocabulary, grammar, punctuation, note reading and realtime writing skills. Instruction shall include the use of electronic media and/or realtime technology with teacher interaction. The course is designed for self-paced modular instruction and shall incorporate the use of Web-enhanced instruction. Upon completion of each module, students should progress to the next module/speed throughout the program.

Pre-reqs:

IRT122

Engineering Tech

Engineering

CET125 SOIL MECHANICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course includes laboratory tests, soil classification systems, and theoretical concepts relative to soil strengths, stresses in soil masses, settlement under structures, bearing capacity for shallow foundations, retaining walls and slope stability. TAG approved course- OET017 effective Summer 2007.

Pre-reqs:

MTH125

Engineering Tech

Engineering

CET226 ESTIMATING

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course develops the methods and procedures for preparing construction estimates, both manually and electronically. Topics include excavation, masonry, concrete, steel and carpentry. Emphasis is placed on take-off procedures and pricing, consideration of labor and equipment costs, and overhead and profit. Computer programs will be utilized to establish a construction schedule. The student will do a complete estimate of a building project and prepare a competitive bid for the job.

Pre-reqs:

CET121

Information Tech

Computer Security

IMT227 3D GRAPHICS ANIMATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn to create and render animations in a 3D development envrionment while exploring basic concepts such as Basic Keyframing, Curve Editors, and Object Hierarchy. Upon completion, the student will understand more advanced techniques such as the use of Constraints/Controllers, Bones Systems, and Facial Animation.

Pre-reqs:

IMT136

Computer Science

CSE224 ANDROID DEVELOPMENT 2

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers advanced mobile applications for the Google Android development. Android best practices will be discussed along with other in-depth Android programming topics. Upon completion of this course, students will demonstrate the ability to create advanced Android applications and the ability to package the applications for deployment in the Android marketplace.

Pre-reqs:

CSE221

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH227 ORDINARY DIFFERENTIAL EQUAT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

In this course students will study first-order differential equations that are separable, linear or exact. Included will be Bernoulli and homogeneous equations. Applications requiring the use of first-order differential equations will include exponential growth and decay, population logistic growth, velocity, mixture, two component series circuits and chemical reactions. Students will also solve higher order homogeneous and nonhomogeneous equations with constant coefficients by the methods of undetermined coefficients and variation of parameters. Equations with variable coefficients, most notably Bessel's equation, will be solved by applying power series techniques. Applications requiring the use of second-order differential equations will include motion, acceleration, and three component series circuits. Students will also perform operations with Laplace and inverse Laplace transforms and solve systems of differential equations using various methods such as elimination, matrices, and eigenvalues. In addition to the analytical methods of differential equations, students will also explore numerical methods such as Euler and Runge-Kutta. TAG approved course OMT020, effective Summer 2013.

Pre-reqs:

MTH224

Business/ Entrepreneurial

Accounting/Finance

ACC221 INTERMEDIATE ACCT I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This is the first in a two-course sequence in the detailed study of accounting theory. It is a study of the conceptual framework of accounting, disclosure standards for general purpose financial statements, and measurement standards for assets, and associated revenues and expenses, including application of compound interest techniques. Upon completion, students should be able to demonstrate competence in applying generally accepted accounting principles in the preparation of financial statements.

Pre-reqs:

ACC132

Sciences

Biology

CST120 COMPUTATIONAL SCIENCE METHODS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The purpose of this course is to introduce the student to basic mathematical concepts relevant to computational science. The course will cover basic statistical analysis and mathematical operations as applicable to the study of science. Data analysis will include fitting data with mathematical functions and developing first and second order differential equations. Other topics relevant to computational science will also be presented, such as recognition of sources of computer error.

Pre-reqs:

Sciences

Biology

CST120 COMPUTATIONAL SCIENCE METHODS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The purpose of this course is to introduce the student to basic mathematical concepts relevant to computational science. The course will cover basic statistical analysis and mathematical operations as applicable to the study of science. Data analysis will include fitting data with mathematical functions and developing first and second order differential equations. Other topics relevant to computational science will also be presented, such as recognition of sources of computer error.

Pre-reqs:

MTH135 Can be Taken Concurrently

Health and Human Services

Physical Therapy

PTA230 SEMINAR II

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Presentation of diverse clinical issues and approaches to patient management.

Pre-reqs:

And PTA228

PTA228 SEMINAR I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Presentation of topics related to clinical practice to include ethics and professional development.

Pre-reqs:

And PTA125

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

MKT221 SALES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The selling process is introduced in detail. Securing and opening the sales interview, delivering the sales presentation, answering objections and closing the sale are all incorporated during the semester. The student will be required to give a sales presentation in class. Upon completion, students should understand the selling process and be able to make an effective sales presentation.

Pre-reqs:

MKT121

Health and Human Services

Respiratory Therapy/MIST

RCT123 AIRWAY MANAGEMENT PROCED

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An introduction to the therapeutic and diagnostic modalities used in the treatment and assessment of pulmonary diseases to include: aerosol therapy, hyperinflation techniques, bronchial hygiene, airway clearance techniques, arterial punctures, and basic respiratory monitoring.

Pre-reqs:

RCT124

RCT125 CLINICAL PRACTICE BP/SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

Clinical experiences provided include an introduction to basic patient care skills such as: medical asepsis, vital sign monitoring, charting procedures, isolation, and resuscitation. Also included are experiences in medical gas administration, aerosol therapy, and hyperinflation and bronchial hygiene techniques. The seminar component consists of an orientation to arterial blood gas interpretation and quality control of arterial blood gas sampling.

Pre-reqs:

RCT124

Information Tech

Computer Science

Information Tech

Computer Science

CSE122A PROGRAMMNG LOGCI & PROB SOLV A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with algorithm development, variables, sequential statements, and conditional statements. Upon completion students should have an understanding of the following concepts: algorithms, variables and data types, basic sequential statements, conditional logic and how to use them in program coding.

Pre-reqs:

And Test & Score: Computer Test - 18

CSE233 C++ PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on software engineering concepts, control structures, functions, arrays, pointers and strings found in C++. In addition, the course also examines data abstraction, classes, and operator overloading in C++. Principles of good software engineering are emphasized. Hands-on labs prepare students to solve real-world problems.

Pre-reqs:

ECA127

Or CSE122

Educ/ Liberal Arts/ Math

English

ENG232 SCRIPTWRITING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will focus on the creation of scripts for corporate marketing, training and educational videos. Narrative structure and dramatic storytelling will be employed in the creation of the scripts.

Pre-reqs:

And ENG124

Health and Human Services

Medical Assisting

Health and Human Services

Medical Assisting

MAT227 MEDICAL ASSISTING PRACTICUM

Credit Hours: 2 Contact Hours: 12 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

The student is placed in a medical facility for 160 hours of practical application of all skills learned in the classroom and for additional instruction in the actual operation and management of the health care facility. The student works under the close observation and supervision of the physician and office staff.

Pre-reqs:

MAT123 Can be Taken Concurrently

Engineering Tech

Engineering/Applied

ENV236 ENV HLTH AND SAFTY SPEC PRJECT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to allow the student to exercise the capabilities developed in other courses within the environmental areas. Special current topics important to the environmental or safety field are also incorporated into this class. Students will choose approved projects compatible with their interest and background. An environmental problem will be studied and all regulations that affect the problem are researched, and a plan of action for compliance, abatement and/or remediation will be developed.

Pre-reqs:

ECA122

Health and Human Services

Medical Assisting

MAT233 MEDICAL ASSISTING SEMINAR

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course is designed to teach students how to write resumes, cover letters and how to interview for employment. Students will also prepare for externship

Pre-reqs:

MAT123 Can be Taken Concurrently

Respiratory Therapy/MIST

Health and Human Services

Respiratory Therapy/MIST

RCT124 PHARMACOLOGY FOR RT

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An orientation to pharmacology including drug classifications, dosage calculations, indications, side effects, and administration. Emphasis is placed on those drugs used in the treatment and management of cardiopulmonary disease including: bronchodilators, mucolytics, steroids, anti-infective agents, smoking cessation aids, central nervous system and cardiac medications and other miscellaneous drugs.

Pre-reqs:

Information Tech

Computer Science

CPD224 ADV MICROSFT SQL SRVR DTBSE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course students will gain the knowledge and skills to design server-side solutions for Microsoft SQL Server. The course focuses on teaching students the skills of database developers who are individuals who work in enterprise environments to identify and place database technologies during design to achieve a suitable solution that meets the needs of an organization. Students will also learn to consider the solution from a system-wide view instead of from a single database or server perspective.

Pre-reqs:

ECA139

CPD223 ORACLE DTBASE: ARCH AND ADM

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Introduction to Oracle Administration and Management is a course designed to provide students with an in-depth understanding of the basic features of Oracle including object-orientation, partitioning and advanced Oracle features for the Internet. The goal in this course is to cover the Oracle architecture and internal mechanisms such that the student is able to perform basic DBA tasks such as database creations, startup and shutdown, and database management. The course also covers Oracle networking basics and the Oracle utility programs. Hands-on exercises are used to demonstrate each feature and the student will gain first-hand experience in the key Oracle DBA concepts.

Pre-reqs:

ECA142

Information Tech

Computer Science

WDD122 WEB GRAPHICS DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers creating and editing backgrounds and graphics for use on the internet. Students will learn appropriate design skills and techniques, design language and study color relationships through demonstrations and hands-on practice in order to reinforce the concepts as they use various leading edge technologies to create graphics. Upon completion of this course, students will be able to analyze web graphics and design; develop web graphics; optimize images for the web and understand the concepts of design as they relate to the web.

Pre-reqs:

Or WDD121

WDD122 WEB DESIGN GRAPHICS A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course covers creating and editing backgrounds and graphics for use on the internet. Students will learn appropriate design skills and techniques, design language and study color relationships through demonstrations and hands-on practice in order to reinforce the concepts as they use various leading edge technologies to create graphics. Upon completion of this course, students will be able to analyze web graphics and design.

Pre-reqs:

Or WDD121

Administrative Srv Off Applion

ITD102 Computer Applications - Word

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the use, styles and features of word processing programs. Upon completion, students should be able to utilize MS Word as a basic business tool.

Pre-reqs:

ITD100

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH125 COLLEGE ALGEBRA

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will study linear, quadratic and absolute value equations and inequalities by applying analytical, graphical, and numerical methods of solution. Elementary functions and non-functions will be examined with reference to extrema, roots (zeros) and end-behavior of their respective graphs. Theory of equations including the Remainder and Factor Theorems, The Rational Root Theorem, and Descartes' Rule of Signs will be used for non-graphical analysis of polynomial functions of degree n. The student will also study exponential and logarithmic functions and the conic sections including their graphs and applications. Systems of equations will be solved by traditional algebraic methods as well as by the application of matrix algebra including determinants. These methods will be extended to include the partial fraction decomposition of rational expressions. TMM001 approved Spring 2012.

Pre-reqs:

Or Test & Score: M093 Transfer Prof/Placement - 2

MTH093 Intermediate Algebra I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline, but especially for those that will eventually pursue a Bachelor's degree. Topics to be covered are linear graphing; solving inequalities and absolute value equations; an introduction to functions; systems of equations; exponents; and polynomials.

Pre-reqs:

Or Test & Score: M092 Transfer Prof/Placement - 3

Health and Human Services

Nursing

NUR223 NUR CARE PERSON/ALT III

Credit Hours: 8 Contact Hours: 14 Lecture Hours: 3 Lab Hours: 11 Other Hours: 0

This course continues to develop the knowledge base necessary for nursing practice. Initially, the course focuses on the nursing care of clients with more complex and acute health problems. Emergency nursing principles are introduced. Management concepts, the organization as a system and the nurse as a manager of client care are subsequently addressed. Application of these concepts is facilitated through a preceptorship. This directed nursing practice will assist in role transition from student to beginning associate degree nurse.

Pre-reqs:

And NUR224 Can be Taken Concurrently

Fire and EMS

Health and Human Services

Fire and EMS

EMS122 PARAMEDIC I/SEMINAR

Credit Hours: 9 Contact Hours: 11 Lecture Hours: 8 Lab Hours: 3 Other Hours: 0

This course is first in a four-course sequence. Content in the sequence follows the objectives for paramedic education according to the Ohio Administrative Code 4765 and includes the knowledge and skills required to perform patient assessment and management of medical and traumatic emergencies by performing rapid assessment, interpretation of data, and advanced intervention, for patients of all ages from neonates to geriatrics. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

And EMS121

EMS221 PARAMEDIC II/SEMINAR

Credit Hours: 9 Contact Hours: 11 Lecture Hours: 8 Lab Hours: 3 Other Hours: 0

This course is second in a four-course sequence. Content in the sequence follows the objectives for paramedic education according to the Ohio Administrative Code 4765 and includes the knowledge and skills required to perform patient assessment and management of medical and traumatic emergencies by performing rapid assessment, interpretation of data and advanced intervention, for patients of all ages from neonates to geriatrics. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

And EMS124

EMS222 PARAMEDIC III/SEMINAR

Credit Hours: 4 Contact Hours: 18 Lecture Hours: 6 Lab Hours: 12 Other Hours: 0

This course is third in a four-course sequence. Content in the sequence follows the objectives for paramedic education according to the Ohio Administrative Code 4765. This course places emphasis on team leadership in the clinical and infield setting. Infield internship is included. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

EMS221

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

BUS221 MICROECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An in-depth study of microeconomic concepts and principles such as supply and demand, price elasticity, production costs, different market structures, income distribution, marginal analysis, and other issues relating to global economics. Upon completion of this course, students should be able to demonstrate an understanding of these topics and be able to apply them to business. TAG OSS004 approved Spring 2012. TMSBS approved Spring 2012.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Accounting/Finance

FIN123 FUND FINANCIAL SERVICES

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces the student to the discipline of personal financial planning and to the various services which support the planning process. The tools and techniques of those services are addressed from two perspectives: (1) a professional occupation and (2) individuals developing and implementing their own long-range financial plan. Specific topics include understanding the financial planning process, ethical and professional considerations in financial services, and introductions to the fundamentals of credit, insurance, investments, and retirement and estate planning. Upon successful completion of this course, the student should understand the fundamental concepts of personal financial planning.

Pre-reqs:

IDS102

Business Mgt/Entrep

ENT120 ENTREPRENEURSHIP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to the entrepreneurial process from conception to birth of a new venture. Students will examine elements in the entrepreneurial process--personal, sociological, and environmental--that give birth to a new enterprise. Critical factors for starting a new enterprise such as alternative career prospects, family, friends, role models, the state of the economy and the availability of resources will be explored. Students will be introduced to practical tools they can use to further their careers in business, both in entrepreneurship and in more traditional company environments. This course simulates the experiences that entrepreneurs undergo in conceiving, launching, and operating new businesses. The courses enables students to evaluate an entrepreneurial career for themselves. In doing so, it provides want- to-be entrepreneurs with a framework for selecting, funding, and starting their own new ventures.

Pre-reqs:

IDS102

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

SOC121 SOCIOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduces the general theories of the field, and research methods. Students will examine the impact of culture, social interaction, social structure, socialization, and social institutions on social behavior.

Pre-reqs:

Or IDS102

Or IDS102

PSY121 GENERAL PSYCHOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Surveys the scientific study of behavior, addressing a wide range of traditional topics including introduction and research; perception; consciousness; learning; cognition; personality; pathology/treatment; development; biological basis of behavior; social and organizational psychology. Emphasizes classical and current theory and research with selected attention to practical application.

Pre-reqs:

IDS102

Or Test & Score: ACT Reading - 18

Information Tech

Computer Security

NET245 MICROSOFT NETWORKING II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course covers administering a Microsoft server operating system. Students will demonstrate skills necessary to administer an infrastructure in an enterprise environment. Topics include implementing group policies, managing user accounts, managing domain services, DNS, and remote access.

Pre-reqs:

Or ECA244

Information Tech

Computer Security

NET131 MICROSOFT CLIENT OPERATNG SYS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course includes installing and administering the Windows Operating Systems. It also covers security issues, installation troubleshooting, desktop issues, and desktop configuration.

Pre-reqs:

Or ECA146

Health and Human Services

Health Information

HIT221 CLINICAL CLASSIFICATNS SYS II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

CPT-4/HCPCS coding system and its application in coding procedures; applying coding guidelines with accuracy and completeness using manual and computerized encoding systems; applying coding guidelines of previously learned coding principles; review of the outpatient prospective payment system.

Pre-reqs:

And HIT124

Business/ Entrepreneurial

Business Mgt/Entrep

BUS222 MACROECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An in-depth study of macro-economic concepts and principles such as market supply and demand, unemployment and inflation, monetary and fiscal policy, national income accounting and Classical and Keynesian models. Upon completion, students should be able to apply and demonstrate an understanding of the above topics relative to today's economy. TAG approved course- OSS005 effective Fall 2005. TMSBS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

PLS227 PARALEGAL STUDIES PRAC/SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

The Practicum component of this course is an individual placement in a selected legal agency or law firm for an educationally supervised learning experience. Students will complete 210 hours at the placement site. The Seminar component of this course is taught concurrently with the student's practical internship experience. The course will emphasize the integration of the practical learning experience with the student's academic coursework in paralegal studies.

Pre-reqs:

PLS221

Education

EDU130 INTRO TO THE TEACHING PROFESSN

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This survey course is an introduction to the teaching profession. Students engage in a variety of experiences that broadly explore the purposes of schools in society and the knowledge, dispositions, and performances required to be an effective teacher today. Ten observation hours required. TAG approved course OED001, effective Summer 2013. CTAG approved course CTED001, effective Summer 2013.

Pre-reqs:

Or Test & Score: Compass English - 070

Health and Human Services

Medical Lab

MLT227 MLT SEMINAR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Topics include professional development, creating resumes and cover letters, discussions of experiences at the clinical sites, discussions of problems that occur in the workplace and problem resolution. The topics of the certification process, professional ethics in the laboratory, and other related topics are included.

Pre-reqs:

And MLT225

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC240 CMA EXAM PART 1 REV CRSE

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers all of the topics that are tested on Part 1 of the Certified Management Accountant (CMA) Exam. Topics include planning, budgeting and forecasting; performance measurement; cost management; internal controls; and professional ethics. Upon successful completion of this course, the student should be prepared to sit for part 1 of the CMA exam.

Pre-reqs:

ACC223 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Social Sciences

PSY229 PSYCHOLOGICAL METHODS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course serves as the keystone experience for those pursuing the Associate of Arts in Psychology. This course synthesizes previous course work to allow the student an opportunity to demonstrate understanding and competency of broad psychological concepts. Additionally, students are provided the opportunity to apply this understanding through exploring concepts of interest within the field by conducting and producing an empirical study. Systematic guidance is provided throughout the course to assist students in understanding the process.

Pre-reqs:

And PSY221

Information Tech

Computer Science

CSE225 CROSS-PLATFORM MOB APP DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines the various methods for developing mobile applications that are compatible with various operating systems. Coding with frameworks that allow for deployment across different systems will be conducted. Upon completion of the course, students should understand how to create mobile applications that will function on different mobile and handheld devices.

Pre-reqs:

And CSE221

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY231 DENTAL HYGIENE THEORY II

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course is designed to further explore treatment modalities and dental hygiene services such oral hygiene indices, tobacco use and cessation education and supplemental care procedures. It focuses on the incorporation of all phases of assessment and the development of more complex dental hygiene treatment plans and case presentation focusing on individual patient care. Required lab activities performed in the clinical setting with manikins and student partners include ultrasonic/sonic instrumentation, air polishing, suture removal, periodontal dressing placement, and advanced instrumentation techniques.

Pre-reqs:

DHY132

Information Tech

Computer Science

WDD121 INTERNER/INTRANET DES & DEV B

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, basics of web design, the HTML markup language, and the CSS style sheet language will be studied. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a basic static website. Specific topics covered include page layout with CSS, tables, forms, and web multimedia.

Pre-reqs:

WDD121A

Business/ Entrepreneurial

Accounting/Finance

ACC121 PRINC OF ACCOUNTING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is an introduction to accounting which covers the accounting cycle and generally accepted accounting principles and practices in financial accounting as applied to business entities. Upon completion of this course, students should be able to analyze and record transactions, prepare financial statements and use financial information in decision making.

Pre-reqs:

Sciences

Chemistry

Sciences

Chemistry

CHM101 INTRO TO CHEMISTRY

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

A problem-solving course to familiarize the student who has limited previous chemistry background with basic chemistry and mathematical skills. Course covers basic algebra skills, powers of ten (exponents), dimensional analysis, metric measurements and conversions, atomic theory, molecular structure, the periodic table and its uses, inorganic nomenclature, the mole concept, the gas laws and different types of solutions. The recitation portion of this class will involve pertinent problem-solving. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: HS Chemistry - 2

Information Tech

Computer Security

CFS287 NETWORK FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to teach students the skills required to identify, acquire, and analyze data gathered from network devices using both passive and active tools. Emphasis will be placed on the use of open-source security tools to conduct an analysis of network activity to gather information relative to an investigation.

Pre-reqs:

And NET121

Health and Human Services

Respiratory Therapy/MIST

RCT227 Neonatal/Peds Respiratory Care

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An introduction to the respiratory care principles and practices related to the care of neonatal and pediatric patients, including a review of neonatal and pediatric cardiopulmonary diseases, mechanical ventilation, special procedures, bronchopulmonary hygiene techniques, and assessment and monitoring.

Pre-reqs:

RCT126

Sciences

Biology

Sciences

Biology

ECO241 Ecology

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course will include topics that cover natural history and evolution, adaptations to the environment, population ecology, inter- and intra-species interactions, communities and ecosystems, and large-scale ecology including landscape, geographic, and global ecology. A supporting laboratory will apply lecture topics in laboratory and field experiences including ecological sampling and analyses, identifying, visiting, and evaluating local ecosystems, and analyzing current environmental issues such as global warming, habitat fragmentation and destruction, extinction of species, human population growth, and depletion of global natural resources. Students will learn about and apply the scientific method by conducting environmental research experiments.

Pre-reqs:

BIO142

Educ/ Liberal Arts/ Math

Education

EDU123 HEALTH AND NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An examination of health and nutritional needs, issues, practices and state licensing as it relates to early childhood programs. Stress management, environmental design and working with children with special needs are addressed. Five observation hours required.

Pre-reqs:

EDU131

EDU229 EDUCATIONAL PSYCHOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Major theories of human development and learning, motivation instructional strategies, assessment, and similarities and differences in learners are examined. The role of factors in the students' environment that influence students' learning and development are considered. Five observation hours required. TAG OED003 approved Spring 2012.

Pre-reqs:

Or EDU131

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT127 WP-MICROSOFT WORD

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, functions, and features of the Microsoft Word program. Creating, editing and storing text are emphasized. Upon completion of this course, the student should be able to produce a variety of professional-looking documents.

Pre-reqs:

And ITD100

IRT229 REALTIME SOFTWARE APPLICATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Instruction in operating realtime court reporting software for the production of the legal transcript. Students are taught the process of recording verbatim testimony via a computerized steno machine; reading, translating, and editing the verbatim testimony to produce the legal transcript; file maintenance; dictionary building; EZ keys; globalizing entries. Upon completion, students should be able to demonstrate knowledge and skills in operating and utilizing the different aspects of the realtime court reporting software.

Pre-reqs:

IRT121

Business/ Entrepreneurial

Business Mgt/Entrep

CUL122 FOOD FUNDAMENTALS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The Food Fundamentals course is an introduction to the development and application of fundamental cooking and techniques. The course introduces the student to entry-level fundamentals such as recipe interpretation, integrated culinary math, culinary terminology, knife skills, large and small equipment identification and use, careers in culinary arts and food service, industry professionalism and entry-level cooking procedures, practices, and techniques.

Pre-reqs:

And CUL120 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH124B Statistics, Module B

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

MTH124A

MTH106 Math for Technology

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed for students in computer science and information technology. Areas of focus will include: sets and Venn diagrams, numbering systems, logic, graphs, greedy algorithms, counting principles, combinatorics, discrete probability, sequences, and series.

Pre-reqs:

MTH091

MTH125 COLLEGE ALGEBRA

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will study linear, quadratic and absolute value equations and inequalities by applying analytical, graphical, and numerical methods of solution. Elementary functions and non-functions will be examined with reference to extrema, roots (zeros) and end-behavior of their respective graphs. Theory of equations including the Remainder and Factor Theorems, The Rational Root Theorem, and Descartes' Rule of Signs will be used for non-graphical analysis of polynomial functions of degree n. The student will also study exponential and logarithmic functions and the conic sections including their graphs and applications. Systems of equations will be solved by traditional algebraic methods as well as by the application of matrix algebra including determinants. These methods will be extended to include the partial fraction decomposition of rational expressions. TMM001 approved Spring 2012.

Pre-reqs:

MTH093

And MTH094

Education

Educ/ Liberal Arts/ Math

Education

ASL122 AMERICAN SIGN LANGUAGE I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is the first in a series of three courses. This course is designed to provide an introduction to American Sign Language (ASL) and its history, focus on basic communication skills, focus on principles of ASL. Students will practice using receptive and expressive skills. Ten observation hours are required.

Pre-reqs:

ASL121 Can be Taken Concurrently

Mathematics

MTH107 Industrial Math

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the topics of elementary mathematics needed for applications in the vocational and technical curriculum. The operation and use of the scientific calculator as a problem solving tool will be emphasized. Topics include: basic concepts, fractions, the metric system, measurements, polynomials, basic right angle trigonometry, ratios and proportions, geometry, oblique triangles, the law of sines and law of cosines.

Pre-reqs:

Or Test & Score: ACT Math - 19

MTH108 Explorations in Modern Mathema

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce the student to the beauty and utility of mathematics in everyday life. The student will be able to reason critically, think creatively, assess evidence from conclusions, and use skills in abstract and quantitative thinking. Topics covered in this course will be: Thinking critically, numbers in the real world (percentages and index numbers), managing your money, statistical reasoning, describe statistical data using measures of center and spread, statistical inference, the normal distribution, solve basic probability applications, mathematics and business.

Pre-reqs:

Or Test & Score: Compass Algebra - 039

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

ITD108 Microsoft Outlook

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the use, style, and features of the Microsoft Outlook program. Upon completion, students should be able to utilize Microsoft Outlook as a communication and business tool.

Pre-reqs:

Or Test & Score: ACT Reading - 14

Education and Human Serv

Education

EDU131 Intro to Child Development

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction of the characteristics and needs of young children from prenatal stages through age eight. Typical growth and development, developmental variations, and influences on development are examined by exploring physical, cognitive, social, emotional, and language domains. Historical and contemporary theories and research that support the importance of play, environments for learning, relationships, and the role of the teacher are presented. Fifteen observation hours are required.

Pre-reqs:

ENG011

Business/ Entrepreneurial

Automotive

TOY103 Toyota Steer, Susp, & Handl

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This course will cover diagnosis, service and repair of the steering, suspension, and handling systems on Toyota vehicles. Upon completion of the class students will have removed and replaced suspension components like: struts, springs, control arms, and steering knuckles. Students will be required to properly diagnose alignment concerns and align vehicles with several different suspension systems. The proper procedures for inspecting, repairing, or changing tire and wheel assembles will be taught in this course. Hydraulic and electronic power steering systems, computer controlled suspension and handling systems will also be covered in this course. Students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Upon completion of this course students will be prepared to take ASE test A-4 (Steering and Suspension).

Pre-reqs:

TOY102 Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

TOY205 Toyota Automatic Transmission

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This course covers the diagnosis, service and repair of Toyota automatic transmissions. Participants will learn how to analyze automatic transmission power flow, learn how to select the proper automatic transmission fluid, and how to check fluid levels for transmissions with and without fluid dipsticks. Students will be required to use the proper Toyota Information System reference materials, test procedures, and specifications to diagnose transmission failures. Students will learn to evaluate proper transmission operation and to perform diagnostic tests to determine necessary repair requirements. Complete transmission overhauls will be performed during this class as well. Students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Upon completion of this course students will be prepared to take ASE test A-2 (Automatic Transmissions).

Pre-reqs:

TOY204

Information Tech

Computer Science

CIS124 ITIL FOUNDATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course presents the student with the concepts necessary to be able to identify, plan, and deliver support of Information Technology services to an organization. The content targets the knowledge of the Service Lifecycle and the integration of IT and core business needs. Team activities systematically reinforce the concepts learned. Upon completion, students will be able to identify ITIL, Information Technology Infrastructure Library, and best practices utilized by major corporations.

Pre-reqs:

Or ITD105

Health and Human Services

Physical Therapy

PTA225 PTA PROCEDURES II NEURO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected cardiovascular, integumentary, neurological, developmental, and traumatic conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

And BIO124

And PTA229 Can be Taken Concurrently

Dietary Management

Health and Human Services

Dietary Management

DTR226 COMM NUTRITION DIR PRACTICE

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 0 Other Hours: 2

CATALOGUE DESCRIPTION: Under the supervision of a registered/licensed dietitian or other qualified preceptor, the student will complete 160 hours of directed practice in a community setting, within a 16 week semester. The student will shadow the dietitian or preceptor, using skills and knowledge learned in Community Nutrition (DTR226), Applied Nutrition (DTR123), Life Cycle Nutrition (DTR122) and Cultural Nutrition (DTR). Students will be placed in community settings, including schools, day cares, WIC, Head Start, Mobile Meals, Nursing Homes, Health Departments, YMCA/YWCA, Cooperative Extension Offices or other community settings.

Pre-reqs:

DTR225 Can be Taken Concurrently

Engineering Tech

Engineering/Applied

ARL235 MIDSIZE UNIT COMPRESSOR ASSEMB

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the procedures, practices, and methods for assembling midsize unit natural gas compressors. Each component and part of the natural gas compressor will be identified. Procedures for assembling parts and components will be demonstrated and practiced so that the student will be ready to assemble a midsize unit natural gas compressor.

Pre-reqs:

ARL142

Educ/ Liberal Arts/ Math

Criminal Justice

CJS140 LAW ENFORCEMENT ACADEMY I

Credit Hours: 8 Contact Hours: 14 Lecture Hours: 5 Lab Hours: 9 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum. The course provides an overview of the American criminal justice system and focuses on Ohio criminal law, criminal procedure for the law enforcement professional, general and investigative report writing, law enforcement driving techniques, and physical conditioning.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Information Tech

Computer Security

Information Tech

Computer Security

NET254 CISCO WIRELESS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to the wireless networking field and prepares them to take the CCNA: Wireless certification exam. Students will start the course working on small stand-alone wireless access points and as the course progresses, move into modular wireless network design using the Cisco Unified Wireless Network (CUWN) framework. Students are also introduced to the Cisco Wireless Control System (WCS) and Mobility Express Wireless Architecture.

Pre-reqs:

NET137

Engineering Tech

Engineering

EET262 PULSE AND DIGITL INTEGRATD CIR

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course is a study of pulse terminology, number systems and codes, TTL and CMOS IC logic circuits and interfacing, Boolean Algebra and logic simplifications, integrated arithmetic circuits, counter, register, encoders, decoders, multiplexers, and demultiplexers, display devices, IC flip-flops, hardware minimization techniques are also covered in conjunction with logic circuit design. TAG approved OET002 effective Summer 2009. CTAG CTEET002 approved Spring 2012.

Pre-reqs:

Or CSE229

Business/ Entrepreneurial

Accounting/Finance

ACC229 COMPUTERIZED ACCTG APPLICATONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course involves the application of the student's accounting knowledge in a computerized setting. The student will record and report accounting information using various commercial accounting packages, including but not limited to QuickBooks Pro and Excel, and practice in problem solving and meeting project deadlines throughout the course. Upon completion, the student should have a functional knowledge of computerized accounting applications and procedures.

Pre-reqs:

AOT226

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

MST134 HYDRAULIC AND PNEUMATIC SYS

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course is a combination of MST122 and MST123 and is the study of fluids, their properties, behaviors and applications. Topics include: basic hydraulic and pneumatic pumps, actuators, valves, piping, hydraulic and pneumatic applications, the various types of hydraulic and pneumatic circuits, and how to troubleshoot these circuits.

Pre-reqs:

MTH101 Can be Taken Concurrently

Or Test & Score: M093 Transfer Prof/Placement - 2

Health and Human Services

Dietary Management

DTR227 FOODSERVICE OPERATIONS I

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This is the first course that introduces the scientific and nutritional principles involved in food preparation including ingredient function, food composition, nutritional quality, terminology, equipment usage, preparation techniques and product evaluation. Quantity food production techniques and principles are introduced. Kitchen design and equipment selection is introduced in terms of usage with products. This course includes a lab section which includes menu costing and preparation, tools, and equipment used in quantity food preparation, 'Mise en place', basic principles of cooking, knife skills, stocks and soups, sauces, principles of all meat, poultry and fish cooking, and vegetables. Fruits, principles of bake shop, yeast breads, and plate presentation are also introduced. Students will also learn healthy cooking principles as required by the dietary guidelines, recipe and menu modification, allergies and understanding of altered textures and buffet presentation of quantity foods.

Pre-reqs:

And DTR228 Can be Taken Concurrently

DTR123 APPLIED NUTRITION

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers the basic application of nutrition assessment to all patients. It also involves the charting of medical records using the current Medical Nutrition Therapy terminology. Along with the process of assessment, the student will learn interviewing techniques and counseling strategies. Nutrition education is introduced using the food exchange lists, nutrition surveys, and the dietary standards.

Pre-reqs:

And DTR221 Can be Taken Concurrently

Health and Human Services

Dietary Management

DTR223 NUTRITION/MNT DIRECTED PRACTIC

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 0 Other Hours: 2

Under the supervision of a registered/licensed dietitian, the student will complete 160 hours of directed practice in a clinical setting, within a 16 week semester. The student will shadow the dietitian and observe the Nutrition Care Process, including the process of nutrition assessment, diagnosis, intervention and evaluation and monitoring. During this rotation, the student will also review charts for medical record documentation, anthropometric data, food-drug interactions and the interpretation of laboratory values. The student will work with the dietitian in examining and participating in the role of the Dietetic Technician in the prevention and treatment of illness and chronic diseases. Applications of treatment will be observed in the management of diseases.

Pre-reqs:

DTR123	Can be Taken Concurrently

Massage Therapy

MAS223 MASSAGE THERAPY REVIEW

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course contains a review of human anatomy and physiology in preparation for the licensing exam for Massage Therapy as a Limited Medical Practice in the State of Ohio.

Pre-reqs:

BIO122

Physical Therapy

PTA222 PTA PROCEDURES II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

This course will present to the students the impairments, disabilities, functional limitations, and interventions of selected musculoskeletal, rhematological and cardiovascular conditions including spinal disorders and amputation. Also included, will be an overview of CNS anatomy, physiology, and pathology, sensory integration, motor development and motor control. Laboratory activities, written assignments and competencies, are required components of this course. Students will perform selected therapeutic interventions with patients under direct PT/PTA supervision as part of laboratory component of this course.

Pre-reqs:

PTA124

Occupational Therapy

Health and Human Services

Occupational Therapy

OTA123 PSYCHOSOCIAL ASPECTS OF OT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Introduction to various health-promoting and inhibiting factors as they relate to occupational therapy practice. Provide training related to one-on-one and group treatment for individuals with psychiatric and/or social impairments. Emphasis on utilizing therapeutic use of self, adapted activities, and the environment as the primary means of promoting psychological well-being and enhancing occupational performance.

Pre-reqs:

And PSY221 Can be Taken Concurrently

OTA224 OT IN PHYSICAL DYSFUN

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Instruction in occupational therapy theories, assessment and screening and treatment for individuals and physical impairments and high risk medical conditions. Emphasis on use of therapeutic activities to restore, maintain and/or facilitate physical well-being and independence.

Pre-reqs:

BIO124 Can be Taken Concurrently

Medical Assisting

MAT231 REIMBURSEMENT FR HLTH CARE SER

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to health care reimbursement. Content covers insurance terminology, legal considerations, third party guidelines, reimbursement methods and managed care reimbursement. It also includes an overview of national insurance plans and coding issues that affect reimbursement. There will also be emphasis on tracking and follow-up of processed claims.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

EST222 Industrial Networks

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide a basic understanding of different types of networks that are used in an industrial facility. Course will cover network terminology, hardware, software, and basic troubleshooting.

Pre-reqs:

Or EST130

Business/ Entrepreneurial

Automotive

AUT183 CAT SERVICE INFORMATION SYSTEM

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course introduces the student to CAT service materials and planned maintenance schedules for fleets using CAT lift trucks. The instructor will demonstrate how to locate CAT technical and parts information. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. Professional image and customer relations will be stressed and how it relates to customer satisfaction. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121 Can be Taken Concurrently

AUT222 ENGINE SYS PER DIAGNOSIS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course presents the techniques used for correct analysis of engine performance and driveability problems. Emphasis is placed on interpretation of manufacturers' product service information and technical service bulletins. Laboratory assignments utilizing automotive diagnostic equipment will reinforce student learning. CTAG approved CTAUT003.

Pre-reqs:

AUT125 Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

AUT233 AUTO DIAGNOSTIC APPLIC

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Auto Diagnostic Applications is an advanced-level course that serves as a capstone for the Automotive Technology program. It is a final assessment of student knowledge and technical skills. Students integrate previously learned principles and concepts with practical field experiences and use specialized diagnostic equipment such as computer scan tools and lab oscilloscopes to evaluate the performance of vehicle systems and components. Under the guidance of an instructor and through an independent study component, students' diagnostic and hands-on skills are further developed and measured while performing component replacement and adjustment procedures to vehicles in a service department setting. The practical application of quality assurance techniques to automotive service work is strongly emphasized. This course also supports and reinforces knowledge required to pass the ASE Automotive Technician Certification examinations.

Pre-reqs:

AUT223	Can be Taken Concurrently

AUT271 HONDA FUEL AND EMISSION SYSTEM

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers Honda-specific diagnosis, theory and repair techniques necessary to service Honda fuel and emission systems. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper fuel and emission system inspection and repair procedures. Hands-on practice will enable the students to apply these concepts to Honda vehicles. Special emphasis is placed on the environmental concerns and engine performance aspects that are related to automotive emission system service.

Pre-reqs:

AUT221	Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

AOT128 DPT-MICROSOFT PUBLISHER

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts and applications of desktop publishing using Microsoft Publisher. Emphasis is placed on the creation of various types of high-quality documents that combine text and graphics. Upon completion, students should be able to design and produce professional business documents and publications.

Pre-reqs:

BCA120

Information Tech

Administrative Srv Off Applion

AOT238 WEB DESIGN FOR OFFICE PROF

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, design, and application for web-page publishing. Students will produce web pages by combining text, graphics, and scanned images. Upon completion, students will be able to design and produce professional web pages using advanced publishing features.

Pre-reqs:

Or ITD122

Engineering Tech

Engineering/Applied

ENV226 WATER SAMPLING,ANAL,CONT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover water sampling techniques and chemical analysis of water quality. Included will be methods of measurement, techniques for sampling and required field instrumentation. Laboratory analysis, date interpretation and proper reporting methods will be developed.

Pre-reqs:

CHM121

Or CHM141

Business/ Entrepreneurial

Business Mgt/Entrep

MGT243 GAMING METHODS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores the gaming methods, policy, and procedures used by different gaming departments. Students will cover topics in casino methods, casino slot operations, table games performance and analysis, and casino mathematics. Students distinguish between the different games such as bingo, keno, roulette, blackjack, poker, baccarat, craps, and policy and procedures associated with security and surveillance.

Pre-reqs:

MGT141

Health and Human Services

Respiratory Therapy/MIST

Health and Human Services

Respiratory Therapy/MIST

MIS127 MIS II/DIRECTED PRACTICE

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 0 Lab Hours: 15 Other Hours: 0

This course provides the student the technical competency skills in sterilization procedures, assembly of instruments, standards of practice, operations, inventory, distribution and product standardization. Students gain technical skills through exposure to the central service processing area in a hospital/surgery center.

Pre-reqs:

MIS125

Educ/ Liberal Arts/ Math

English

ENG124 COLLEGE COMPOSITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course emphasizes writing based on reading response with review of essay development, grammar, and punctuation. Emphasis is on the process of drafting, revising, and editing to achieve clarity. A research project requires APA or MLA documentation. TMEC Approved effective Autumn 2008.

Pre-reqs:

Or ENG101

Mathematics

MTH106 Math for Technology

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed for students in computer science and information technology. Areas of focus will include: sets and Venn diagrams, numbering systems, logic, graphs, greedy algorithms, counting principles, combinatorics, discrete probability, sequences, and series.

Pre-reqs:

Or MTH100

Educ/ Liberal Arts/ Math

Mathematics

MTH125 COLLEGE ALGEBRA

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will study linear, quadratic and absolute value equations and inequalities by applying analytical, graphical, and numerical methods of solution. Elementary functions and non-functions will be examined with reference to extrema, roots (zeros) and end-behavior of their respective graphs. Theory of equations including the Remainder and Factor Theorems, The Rational Root Theorem, and Descartes' Rule of Signs will be used for non-graphical analysis of polynomial functions of degree n. The student will also study exponential and logarithmic functions and the conic sections including their graphs and applications. Systems of equations will be solved by traditional algebraic methods as well as by the application of matrix algebra including determinants. These methods will be extended to include the partial fraction decomposition of rational expressions. TMM001 approved Spring 2012.

Pre-reqs:

Or MTH123

Sciences

Physics

PHY125 ASTRONOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This class is a study of fundamentals of astronomy. Topics include: the solar system, planets, stars, galaxies, and the universe. This course is a comprehensive survey of astronomy designed primarily for the non-science major. Pivotal discoveries discussed in class are reinforced through lab activities that replicate topic-related studies. This course should provide the student with an understanding of the nature of the universe and insight into the scientific fields that provide the evidentiary basis for modern cosmological theories.

Pre-reqs:

Or Test & Score: Compass Algebra - 055

Or Test & Score: ACT Reading - 18

Business/ Entrepreneurial

Automotive

AUT327 ACDELCO HONDA EMISSION & DRIVE

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (CBT) related to Honda OBD-2 computer control systems. This course is intended for experienced ACDelco TSS technicians and concentrates on vehicle ECM/PCM diagnostics. The instructor will demonstrate Honda OBD-2 related diagnosis, servicing, and repair techniques. An in-depth overview of OBD-2 operating parameters, emission systems monitors, and self-diagnostics will accompany hands-on practice. On-vehicle testing will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Engineering Tech

Engineering/Applied

MST224 DIMENSIONAL METROLOGY

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An in-depth study of measuring principles, instruments and techniques. This course covers the measuring tools most commonly used in industry. Course covers how to read and use these instruments, how to prevent the most common errors and how to minimize errors.

Pre-reqs:

Engineering

CET231 LEGAL PRINC OF SURVEYING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The laws of land ownership, title guarantees, deed platting, interpretation of property descriptions, riparian rights and establishment of property lines will be discussed. Also covered will be the surveyor's rights, duties and liabilities; the state of Ohio survey laws; and minimum standards for boundary determination, description writing and map preparation. The historical development of the rectangular system of land subdivision will be covered, with primary emphasis placed on Ohio, as it is the site of the first public land surveys.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT250 AUTO TRANSMIS/TRANSAXLE DIAG

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will help the student to develop the knowledge and skills needed to properly diagnose transmission faults related to electrical inputs to the PCM and their effects on transmission operation. Specifics covered in this course include: strategy based diagnostics, TCC operation, shift quality, and OBD II System diagnostic information.

Pre-reqs:

Health and Human Services

Fire and EMS

Health and Human Services

Fire and EMS

EMS123 EMERGENCY MEDICAL RESPONDER

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The Emergency Medical Responder course provides theory and practical skills training for managing medical and traumatic situations at the EMR level and follows the objectives as listed in the Ohio Administrative Code. CTAG approved course CTFR001, effective Summer 2013.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS111 Music Fundamentals

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

PSY124 INDUSTRIAL/ORGANL PSYCH

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Drawing from a wide range of psychological theories, principles and research, this course emphasizes personal and interpersonal skill-building beneficial to the prospective professional. Topics include learning and memory; perception; motivation and leadership; group dynamics and team-building; problem-solving and conflict resolution; communications; and stress management. Ohio Transfer Module effective Autumn 2008.

Pre-reqs:

Health and Human Services

Human Services

Health and Human Services

Human Services

SWK226 SOCIAL SERVICE LAW

Credit Hours: 3 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 0 Other Hours: 3

This course provides comparisons of the theoretical basis of social work and law. Basic terminology, principles, organization and procedures of law will be explored along with the relationships of the two professions-law and social work.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KSOC999 Social Sciences

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

SOC122 SOCIETY AND TECHNOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An examination of the consequences of technological change on social organizations, cultural values and social institutions, and the response or adaptation of social systems to this change. Includes an assessment of the social problems of a technological age as seen through current events. TMSBS Approved effective Autumn 2008.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT193 Automotive Co-op 3

Credit Hours: 2 Contact Hours: 24 Lecture Hours: 0 Lab Hours: 24 Other Hours: 0

Cooperative work experience opportunities are available to students enrolled in Automotive Department programs. Students may contact the Automotive Department Programs Coordinator for specific information regarding co-op opportunities. During this course, students will gain practical work experience by diagnosing and repairing HVAC concerns, diagnosing electrical faults, and diagnosing and servicing manual transmission systems. Under special circumstances, sponsoring automotive repair facility and the instructor can determine specific tasks to be performed during the co-op.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS122 CRIMINAL LAW AND PROCEDURES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on criminal law and criminal procedures for the law enforcement professional. Specific topics include the Ohio Revised Code, search and seizure, and arrest.

Pre-reqs:

Engineering Tech

Engineering/Applied

MST223 HYDRAULC AND PNEUMATC ELEC

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers the study of fluids, their properties, behavior and applications. Various hydraulic and pneumatic circuits, along with cycle charts and associated electrical circuits, are reviewed. Students are required to know components and their identification symbols and operations.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KMTH999 Math and Critical Reasoning

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT242 ENTERTAINMENT SYSTEMS

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers methods of operation and procedures for diagnosis of both GM audio systems and video entertainment systems. Systems entered include antennas, lead-in cables, integral receivers, remote components including receivers, control heads, tape players, CD and video players, and steering wheel controls (SWC). Diagnosis and correction of audio systems, noise conditions, and video system malfunction are also covered.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL128 PRECISION GRINDING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to give the student an introduction to the different types of precision grinding. Both CNC and manual grinders will be discussed. The manual function and all aspects of preparing grinding wheels for operation, including the basics of selecting, dressing, and balancing the different types of grinding wheels as applied to the various types of metal will be discussed in great detail. The set-up of specialized grinding fixtures will be explained. All safety issues will be stressed.

Pre-reqs:

Engineering Tech

Engineering/Applied

EUT124 SUBSTATION TECHNOLOGY II

Credit Hours: 6 Contact Hours: 10 Lecture Hours: 2 Lab Hours: 8 Other Hours: 0

Provides the knowledge and skill to safely perform maintenance in electrical substation and switchyards; understand and apply the proper cable pulling/bus work techniques; installation of substation conductors/wire, switches and grounding techniques. Included is advanced electrical skills training, as applicable to the use and installation of batteries, fuses, transformers, regulators/reclosers, circuit breakers, and capacitors within the substation. The proper lockout/tagout techniques and principle will be included in this course.

Pre-reqs:

Sciences

Biology

GEO141 PHYSICAL GEOLOGY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Investigation into the physical earth materials and processes. These processes include mineral formation, igneous rock and metamorphic deformation associated with plate tectonics, sedimentary rock formation and geologic time, geomorphology of the surface rocks through hydrologic processes including weathering, mass wasting and erosion. Emphasis on recognizing the impacts of earth science on society. Supporting lab to emphasize the use of technology in earth science, topographic and geologic map reading skills, and identification of minerals and rocks. TAG approved OSC011, effective Summer 2013

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL234 GAS COMPRESSION/FLOW DYNAMICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will review basic math required to understand equations and ratios which impact the function of natural gas compressors. Material will focus on understanding equations which are important to compressor assembly and operations. Students will also review variables and understand the relationships between variables in these types of equations.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT217 ACDELCO HVAC CNTRLS, OPER DIAG

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Building upon the technicans knowledge obtained in the related ACDelco HVAC web courses, this all makes instructor led course utilizes class discussion and hands on lab experience to improve the participant's HVAC control system diagnostic skills with respect to: controlling compressor operation, system input devices, engine fan controls and operation, manual, electronic and automatic temperature control, air delivery and flow controls, and, one adjustable climate controls. An overview of HVAC system control operation, clutchless pulley design, single and multiple zone controls, and, airflow control is presented within this course. Exercises assigned by the instructor are comprised of: desk, bench, case study, on-vehicle, and proper tool usage activities.

Pre-reqs:

Engineering Tech

Automotive

ETD202 ENG INDEP STUDY

Credit Hours: 2 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Engineering Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Engineering Technology will determine course content, meeting schedules and credit hours.

Pre-reqs:

Information Tech

Computer Security

HLS122 INTELLIGENCE AND HOMELAND SEC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will explore the organization and functions of U.S. Intelligence and Homeland Security, its interaction with national security policymakers, key issues about its workings, and the challenges it faces in defining its future role. The events of 9/11 focused new attention on national intelligence, including the most significant reorganization of the community since the National Security Act of 1947. The course will highlight some of the major discussions about the role, practices, and problems of intelligence.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KARF999 Fine Arts Core Course

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Information Tech

Computer Security

HLS121 INTRO TO EMERGENCY MGT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides awareness-level emergency preparedness training for the first responder's workforce. The course is a study of the theory and practice of incident command, the various methods of incident command, with specific focus on Incident Command System and NIMS. Cases will be studied in order to assist students in understanding the management and leadership associated with modern emergencies and disasters.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT143 AUTO HVAC SYS TOYOTA 750

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed for Toyota dealership technicians and students that desire to become Toyota dealership technicians. This course is designed to provide the student with a sound knowledge of the theory and repair of Toyota heating and air conditioning systems. Before taking this course, the student should have a basic knowledge of automotive and electrical equipment, and experience with common shop tools and techniques. The instructor will demonstrate Toyota HVAC system diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to Toyota vehicles. Special emphasis is placed on the safety aspects related to heating and air conditioning service. The student will complete 2 hours of out-of-class assignments and answer review questions.

Pre-reqs:

Business Studies

Business/ Entrepreneurial

Business Studies

BTD202 BUS INDEPENDENT STUDY

Credit Hours: 2 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Business Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisory and dean for Business Technologies will determine course content, meeting schedules and credit hours.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KSOC999 Social Sciences

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT285 GM DIESEL ENGINE PER CERT ASSM

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the students the skills necessary to work with diesel engine performance systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing diesel engine performance systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in this course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Information Tech

Computer Science

Information Tech

Computer Science

EET245 TECH PROJ-ELECC TELECOM

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A course designed to allow the student to use the capabilities developed in the telecommunications program courses to carry a project from concept to completion.

Pre-reqs:

Health and Human Services

Nursing

HTD201 HLTH INDEP STUDY

Credit Hours: 1 Contact Hours: 10 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Health Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Health Technology will determine course content, meeting schedules and credit hours.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

AOT121 KEYBOARDING/FORMATTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Knowledge of keyboard is required. This course is designed to refine the fundamentals of "touch" control of the keyboard and proper keyboarding techniques. Major objectives are to build speed and accuracy at the keyboard and to apply keyboarding skills in the formatting of business correspondence, tables and reports. Upon completion, students should be able to format a variety of business documents using a popular word processing package and achieve a minimum keyboarding skill.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV140 BASIC WATER TRTMT-COAG/FLOC

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of water treatment. The topics of this course include general issues operators face when dealing with coagulation and flocculation. Along with reading assignments from the text, the course is enhanced with audit, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS123 FIREARM TECHNIQUES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on firearm techniques. Specific topics include safety procedures, handgun and related equipment, shooting techniques, and shotgun training. CTAG approved Spring 2012 CTBPO.

Pre-reqs:

Engineering Tech

Engineering

CET122 ARCHITECTURAL DRAFT I

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course familiarizes the student with the preparation and comprehension of basic architectural drawings. Intended for those with little or no drafting experience, the course will concentrate on drafting techniques through the drafting of plans, elevations and selected details, in pencil on vellum.

Pre-reqs:

Engineering/Applied

Engineering Tech

Engineering/Applied

EUT121 OVERHEAD LINE TECHNOLOGY I

Credit Hours: 6 Contact Hours: 10 Lecture Hours: 2 Lab Hours: 8 Other Hours: 0

Provides the knowledge and skill to perform work on secondary voltage circuits; understanding of the techniques used to install transmission support systems, transformers and install anchors safely and efficiently with concentration on the installation of services, street lighting and secondary circuits. Included are advanced training pertaining to the various transmission support system framing techniques and guying methods. An overview of transmission and distribution of electrical systems, Occupational Safety and Health Administration (OSHA) and rigging safety awareness requirements will be included in this course.

Pre-reqs:

AIT130 STRUCTURAL MAINTENANCE WELDING

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course will cover safe working procedures of structural/ maintenance welding and the student will lay out and set up various structural welding scenarious using gussets, back plates, and other standard repair implements. They will be supervised for proper form and procedure while performing the required practices in lab. The preparation, cutting and joining of carbon steel (A-36) using oxy/acetylene gas and SMAW (DCEP) electric arc in the flat, horizontal, vertical and overhead positions will also be performed.

Pre-reqs:

Information Tech

Computer Security

IMT135 MUSIC THEORY AND COMPOSITION I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The creation of music using classical notation is the focus of this course. The student will be able to explain music theory fundamentals and its related rules. Upon completion of this course the student will be able to compose and arrange 16-32 bar songs with theoretical accuracy.

Pre-reqs:

Health and Human Services

Health Information

Health and Human Services

Health Information

HIT230 HLTH CARE DELIVERY IN THE US

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course focuses on the structure and process of health care in the United States. Topics include the historical development of the health care delivery system; types of facilities, services, agencies and personnel that constitute the system, critical policy and regulatory issues the system confronts; health care financing and reimbursement; and the role of government in health care.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT138 APPLIED AUTOMOTIVE PRINCIPLES

Credit Hours: 4 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This course is designed to help the student develop greater confidence and better hands-on skills by providing an instructor-guided work experience in an automotive lab environment. By referencing service information and applying a strategy-based diagnostic approach, students will be able to reinforce their existing technical skills and develop new service techniques that will help them to be better prepared to enter the workplace as an automotive technician.

Lab tasks, service information, and instructor-led discussions will cover Automotive Service Excellence (ASE) certification areas A-1 Engine Repair, A-4 Suspension and Steering, A-5 Brakes, A-6 Electrical/Electronic Systems, and A-7 Heating and Air Conditioning. ASE is the nationally recognized industry standard for automotive technician certification.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KHIS120 U.S. Formative Period

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS230 PATROL ADMINISTRATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on patrol administration. Specific topics include patrol techniques, responding to crimes, gang awareness, communications and radio procedures, and prisoner booking and handling. CTAG approved Spring 2012 CTBPO.

Pre-reqs:

Sciences

Biology

BIO127 HUMAN BIOLOGY

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

Human Biology presents the human as an organism as it relates to itself, to other humans, and to the environment. Lecture will present the scientific study of the human body including the aging process. Observations about the human at the chemical, cellular and systemic levels will be made in the laboratory incorporating a variety of laboratory experiences and may include the observation of human cadavers and other preserved specimens as learning tools. Practical work and group learning strategies will be used to facilitate evaluative learning in both the lecture and lab. The course will guide the student in a multidisciplinary study of the biology of human life. TMNS Approved effective Autumn 2008.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS312 Composition

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS111 Music Theory 1

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Accounting/Finance

ACC130 BUSINESS LAW AND ETHICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An examination of the functions of the legal system in the business environment. This course includes the study of traditional business law topics and other basic topics applicable to business. A close examination of the intersection between professional ethical decision-making and the legal system as it applies to business. Upon completion, students should be able to demonstrate competence in the fundamental concepts of business law and ethics. TAG approved course-OBU004 effective Fall 2005.

Pre-reqs:

Business Mgt/Entrep

CUL230 Culinary Practicum

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This is a capstone experience designed for the student to put their learning into practice. The student will work with a mentor in a food service operation to gain practical experience and work in a wide range of culinary areas. The course will be a blend of work experience, job performance and a series of designated face to face meetings.

Pre-reqs:

Information Tech

Computer Security

Information Tech

Computer Security

IMT122A GRAPHIC ARTS DESIGN A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

Students successfully completing the Graphic Arts Design A (IMT122A) course will acquire a working knowledge of the concepts, components and composition necessary in the design of print media. They will learn effective communication through design, beginning with the concept and concluding with the finish product.

Pre-reqs:

Health and Human Services

Nursing

NUR123 NURSING CARE OF CHILDREN

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

This course focuses on nursing care of children and their families experiencing alterations in health. Nursing care plans are developed for all age ranges of children. Alterations in health are studied in relation to their effect on the developmental status of children. CTAG CTADNUR002 approved Spring 2012.

Pre-reqs:

NUR122 Can be Taken Concurrently

Information Tech

Computer Security

IMT261 ADVANCED MUSIC TECHNOLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Advanced Music Technology requires students to utilize the skills they have developed throughout the Music Technology and Applied Music Technology classes. Students will refine their skills as music producers and engineers by completing regular homework assignments and four large-scale projects, designed to build professional-standard portfolios.

Pre-reqs:

IMT239

Engineering Tech

Engineering

Engineering Tech

Engineering

DET124 WORKING DRAWINGS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Course covers threads, welding, fasteners, tolerancing, fits, and basic geometric dimensioning as they relate to detail and assembly drawings. Students are required to complete a set of working drawings that are technically correct and feasible for production. Emphasis is placed on the various components that constitute a well-executed drawing.

Pre-reqs:

And DET125 Can be Taken Concurrently

MET221 ADV STRENGTH OF MATERIAL

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The study of torsion, columns, combined stresses, thin- walled pressure vessels, connections (bolted, riveted and welded), and statically indeterminate beams. Emphasis is placed on learning the fundamentals and applying them to solving problems. TAG approved course- OET008 effective Spring 2008.

Pre-reqs:

MET124

Business/ Entrepreneurial

Business Mgt/Entrep

MGT223 BUSINESS DECISION MAKING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course utilizes a multitude of managerial business decision making skills that culminates your business management classroom experience. It involves an actual competitive team-based decision making computer simulation. The course includes in-depth analysis and research into production, inventory, finance, research and development, pricing, product placement, and industry competitiveness decisions. The course requires teamwork and an understanding of all the areas of business decision making to successfully manage a corporation. Upon completion of this course a student should have a greater understanding of the impact of teamwork, functional department interactiveness, and competitive market analysis on everyday business decisions.

Pre-reqs:

And MGT121

Health and Human Services

Medical Lab

Health and Human Services

Medical Lab

MLT124 HEMATOLOGY II

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

Course is designed to reinforce hematological techniques previously learned by the student in Hematology I. Emphasis is placed on white blood cell differentials with blood cell morphology and associated disease states. Other topics, with clinical application, include: cerebral spinal fluid cell counts, sickle-cell preps, the leukemias, infectious mononucleosis and other blood dyscrasias by prepared microscopic slide collection, kodachromes and case histories, and coagulation studies. TAG OHL009 approved Spring 2012. Must complete MLT123 & MLT124 to obtain TAG approval.

Pre-reqs:

MLT123

Information Tech

Computer Security

ECA130 SOFTWARE VULNERABILITIES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Enumeration, exploits, keygens and other application vulnerabilities are presented. Security holes and exploitations in computer, interpreted and web based applications are addressed in a hands-on environment.

Pre-reqs:

ECA127

IMT246 APPLIED MUSIC TECHNOLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A practical application of the student's knowledge of music, music technology, and computer software/hardware technology. The student will create a number of musical compositions assisted by MIDI software/hardware interfaces and merge these compositions with web sites, training videos, marketing presentations and other practical applications of software engineering technology.

Pre-reqs:

IMT250

Engineering Tech

Engineering

Engineering Tech

Engineering

EET225 DIGITAL COMM AND SYS ANALY

Credit Hours: 3 Contact Hours: 6 Lecture Hours: 0 Lab Hours: 6 Other Hours: 0

The course deals with implementing data acquisition, instrumentation control, data analysis and presentation. Serial and parallel interfaces are used for the instrumentation communication to the networks (internet and intranet). Programming involves using a graphical user interface (GUI).

Pre-reqs:

EET248

Information Tech

Computer Science

EET260 COMPUTER FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course presents computer crime investigations. Demonstrations and hands-on practice will reinforce topics such as computer crime, programming in the network monitoring platform, trap and trace techniques and patch level enumeration. Upon completion, the students will be able to provide detailed descriptions of computer crimes and understand the technology related to a response team.

Pre-reqs:

ECA127

EET261 ADVCD NETWKG AND SECURTY TPC

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Session hijacking, trojans, virii, input validation and other types of attacks are covered in this class. Ghost Mail, NetCat and war dialers will be used as tools to provide counter measures against the computer criminal.

Pre-reqs:

ECA129

Educ/ Liberal Arts/ Math

English

Educ/ Liberal Arts/ Math

English

ENG222 HEALTH INFORMATION WRITING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Health Information Management Technology students develop skills in various kinds of writing to meet the needs of the global workplace, such as letters, memos, emails, instructions, reports, abstracts, minutes, agendas, summaries and proposals, in addition to developing a resume with a letter of application. Students will learn research techniques based on medical databases related to health information as well as other electronic sources in this technology.

Pre-reqs:

ENG124

Engineering Tech

Engineering/Applied

ENV228 HEALTH AND SAFETY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course helps students develop an understanding of site occupational health and safety programs including: good industrial and construction workplace practices, ergonomics, chemical toxicology, respiratory protection, personal protective equipment, record keeping, industrial hygiene sampling, ventilation measurements, machine guarding methods and accident prevention.

Pre-reqs:

ENV121

Health and Human Services

Health Information

HIT122 ALTERNATVE HLTH RECS AND REGST

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Structure and function of non-acute healthcare facilities; accreditation and regulatory requirements; reimbursement and funding; content and structure of health records and documentation requirements; information management and the role of the HIM professional; overview of health registries with emphasis on cancer registry; students will spend observation time in a non-acute healthcare setting.

Pre-reqs:

HIT121

Health and Human Services

Health Information

HIT124 CLINICAL CLASSIFICATNS SYS I

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

ICD coding systems and the professional standards for coding and reporting diagnostic inpatient and outpatient services and inpatient procedure services; coding characteristics, conventions and guidelines will be applied in identifying and accurately assigning codes; manual and electronic applications and coding references will be utilized in the coding process; study of various nomenclature and classification systems used in the healthcare field.

Pre-reqs:

HIT121

And BIO122

HIT222 HLTHCRE STATSTICS AND RESEARCH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Collection, organization, analysis and presentation of healthcare data; vital and public health statistics; computation and interpretation of healthcare statistics; data retrieval of clinical information from specialized databases; abstracting and maintaining data; importance of data quality and validity; reviewing Institutional Review Board processes.

Pre-reqs:

HIT122

Engineering Tech

Engineering/Applied

HVC224 HVAC SYS OP AND TRBLST- COOLNG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Cooling equipment and systems operation are studied together with development of problem solving techniques. Through the use of laboratory demonstrations, measurements, observations and experiments with HVAC systems and components, the student learns proper system diagnosis and repair procedures.

Pre-reqs:

HVC122

Engineering Tech

Engineering/Applied

HVC232 ADVANCED HVAC APP CONTROLS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

HVAC equipment application design concentrating on commercial and light commercial systems is presented. Roof-top units, economizers, water chillers, air handling units and IAQ are covered. Commercial system controls and zone controls including residential zoning are studied.

Pre-reqs:

HVC222

HVC236 ADV HVAC ELECTRICAL APPLIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course encompasses complex HVAC control circuitry schemes, including microprocessor controlled as used on large chillers, large tonnage DX, and DDC controls. The student outcome is full understanding of control functions, sequence of operation, and troubleshooting skills applicable to complex HVAC circuitry. This ensures that the student has the ability to systematically and logically troubleshoot these complex systems with efficiency and accuracy.

Pre-reqs:

HVC234

Business/ Entrepreneurial

Automotive

AUT231 SPECIALIZED ELEC TRAIN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This is an elective course for automotive students that covers the fundamental laws of electricity, electrical schematic reading, wire repair, digital multimeter operation, service manual usage and electrical diagnosis of GM vehicles. Students participate in hands-on activities dealing with the vehicle electrical systems including: power windows, power door locks, wipers, HVAC, chime module, charging and starting, audio and ECM/PCM. This course emphasizes GM's strategy based diagnosis of electrical systems.

Pre-reqs:

AUT125

Sciences

Biology

Sciences

Biology

BIO124 HUMAN DISEASES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course encompasses the etiology, pathogenesis, manifestations and basic treatment of diseases and disorders of the human body. Special attention is given to organic and infectious diseases as well as immune dysfunction and neoplasia. Case studies are utilized to gain an understanding of disease processes and treatments. TAG approved course - OHL019 effective Fall 2005.

Pre-reqs:

Or BIO123

BIO222 PHARMACOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A course that introduces the student to general pharmacology, including drug nomenclature, classifications, and therapeutic and side effects on the body systems and functions.

Pre-reqs:

BIO122

Business/ Entrepreneurial

Business Mgt/Entrep

BUS223 INTERNATIONAL ECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers the economic analysis of international trade and foreign investment, including theories of international trade, balance of payments, exchange rates and international monetary arrangements, adjustments of payments disequilibrium, and government policies on trade and aid. Upon completion, students should be able to demonstrate an understanding of the international economic environment.

Pre-reqs:

BUS221

Engineering Tech

Engineering

Engineering Tech

Engineering

CET223 STRUCTURAL DESIGN I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to the analysis of simple structures. Topics include the application of loads on structures, and the analysis and design of steel and concrete members such as beams, columns, and frames. Current computer software for structural analysis will also be used.

Pre-reqs:

MET124

CET234 A/E CAD

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Building on the concepts learned in Basic AutoCAD, this course is designed to explore the production of architectural working drawings using software designed specifically for the architectural/engineering disciplines. Students will produce a variety of architectural working drawings on the computer-aided drafting system.

Pre-reqs:

And CET122

Health and Human Services

Dental Hygiene

DHY124 PERIODONTICS I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Introduction to the etiology, diagnosis, and prevention of diseases affecting the tissues that support, attach, and surround the teeth. Basic periodontic terminology and concepts utilized for dental hygiene care to include patient periodontal assessment and treatment modalities. Term and concepts applied in the clinical setting in DHY 133.

Pre-reqs:

DHY122

Business/ Entrepreneurial

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC238 FINANCIAL STATEMENT ANALYSIS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course provides an analytical perspective of corporate finance in the business. The role of financial statement analysis in managerial decision making will be emphasized. The course will present an in-depth review of the Balance Sheet, Income Statement of Stockholders' Equity, and the Statement of Cash Flows. The course will also cover methods of analyzing liquidity and profitability using both financial ratios and trend analysis. Upon completion of this analyze financial data and develop strategies for effectively minimizing corporate financial risk.

Pre-reqs:

ACC133

Sciences

Chemistry

CHM121 GEN/ORG AND BIOL CHEMISTRY I

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Principles of general and inorganic chemistry are presented in lecture. Topics include atomic structure, chemical bonding and compounds, energy changes, gas laws, solutions, and acids and bases. The laboratory experiences include basic scientific measurements, physical property measurements, inorganic physical and chemical change observations and laboratory reporting.Ohio Transfer Module Approved Effective Autumn 2008.

Pre-reqs:

Or Test & Score: HS Chemistry - 2

Information Tech

Computer Security

IMT254 PORTFOLIO DEVELOPMENT-IMT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This capstone course will focus on developing and completing complex print design projects and a portfolio. These projects are used to assess the students competencies and proficiencies acquired in the program. A portfolio is required.

Pre-reqs:

And IMT245

Information Tech

Computer Security

IMT255 ADVANCED ILLUSTRATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will expand on the skill learned in IMT253 and will focus on logo design and illustration design using Adobe Illustrator. Demonstrations will include hands-on projects produced by students to enhance their their understanding of vector artwork. Upon completion of this course, students will have an increased knowledge and understanding of Adobe Illustrator, logo design and illustration design.

Pre-reqs:

Or ECA243

HLS220 WEAPONS OF MASS DESTRUCTN AWAR

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is intended for first responders likely to witness or discover hazardous substances and initiate an emergency response sequence. This course is intended to meet Federal OSHA standards for police and other public-sector personnel.

Pre-reqs:

HLS123

Engineering Tech

Engineering/Applied

AIT221 ADVANCED CNC PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover in great detail all the facets of a CNC lathe as compared with a CNC vertical turning center, as well as a CNC vertical milling machine as compared with a horizontal milling machine. The similarities as well as the differences and the advantages of each machine style will be covered. The details will include the accuracy, ease of operation, and the preventive maintenance required. The different specialized fixturing will be stressed.

Pre-reqs:

Or ARL121

Or ARL122

Engineering Tech

Engineering/Applied

AIT223 ANALS/APPLIC OF WIND TURB ENGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course instructs a student in the overall design, analysis, and operation of a wind turbine system. A final project presents a complete design based on real world application.

Pre-reqs:

AET121

Engineering

CET239 BUILDING CODE APPLICATION

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Commercial building and residential building codes are studied to become familiar with the general intent of the codes in selected areas and how they relate to the construction industry. Special attention is paid to portions of the code that are typically a problem to code officials in the prosecution of their duties.

Pre-reqs:

CET121

Or CET122

Business/ Entrepreneurial

Business Mgt/Entrep

MGT222 SMALL BUSINESS MGT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on launching and operating a small business. Developing a business plan is an integral part of the coursework. Upon completion of the course, students will have an understanding of the multitude of issues involved in owning a small business and how to develop and utilize a business plan in a small business.

Pre-reqs:

And MGT121

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM125 INTRO TO COMMUNICATION THEORY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will provide students with a survey of the basic elements of communication in a variety of contexts including interpersonal, group, organizational, intercultural, and mass media. Analysis and application of communication theories is emphasized as well as the study of current communication theory research. This course is Ohio TAG approved. OCM001 effective Summer 2008.

Pre-reqs:

Or Test & Score: ACT Reading - 19

Or IDS102

Sciences

Chemistry

CHM241 ORGANIC CHEMISTRY I

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

A broad overview of chemical principles and reactivity of organic compounds. Topics include structure, bonding, nomenclature, reactions, reaction mechanisms, and synthesis of alkanes, alkenes, alkynes, alkyl halides, and aromatic compounds. Additional topics include stereochemistry and an introduction to spectroscopic techniques such as UV, IR, NMR, and mass spectroscopy. TAG OSC010 sequence approved Spring 2012.

Pre-reqs:

CHM142

Engineering Tech

Engineering/Applied

AIT137 CAD/CAM

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course is designed to give a student the basic understanding of programming for machining centers and for turning centers, using the latest Computer Aided Design/Computer Manufacturing CNC programming software.

Pre-reqs:

AIT122

Engineering Tech

Engineering/Applied

AIT225 ADVANCED CAD/CAM

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course is designed to advance the student's knowledge of Computer Aided Design/Computer Aided Manufacturing CNC programming software.

Pre-reqs:

AIT137

Health and Human Services

Dental Hygiene

DHY225 ANESTHESIA AND PAIN CONTROL

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

This course will teach the basic concepts of anesthesia and pain control as they relate to patient management in the provision of comprehensive dental hygiene care. Lecture will focus on theory of pain control, selection of pain control modalities and implications of local anesthesia. Topics will utilize knowledge and review of anatomy, physiology and pharmacology. Lab includes competency based practice of the administration of pain control modalities.

Pre-reqs:

BIO122

Information Tech

Computer Security

NET134 CCNA PHASE I

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course introduces students to the networking field. Upon completion of this course, students can perform entry-level tasks in the planning, design, installation, operation, and troubleshooting of Ethernet and TCP/IP networks. Technologies include networking mathematics, terminology, models, media, LAN and WAN testing and cabling, Ethernet operation, switching, IP addressing and subnetting, IP, TCP, UDP, and application layer protocols.

Pre-reqs:

ECA146

Information Tech

Computer Security

NET135 CCNA PHASE II

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course focuses on initial router configuration, Cisco IOS software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Students will learn how to configure a router, manage Cisco IOS software, configure routing protocols on routers, and set access lists to control access to routers. Technologies include Cisco IOS Software Management, router configuration and file management, RIP and IGRP routing protocols, TCP/IP error and control messages, and Access control lists.

Pre-reqs:

Or NET134 Can be Taken Concurrently

Sciences

Biology

BIO221 PRINC OF MICROBIOLOGY

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course examines microbial structure and function with particular emphasis on medical microbiology. Content includes taxonomy, identification procedures, microbial growth and control, microbial genetics and the epidemiology of common infectious diseases. The laboratory experiences include staining, culturing and aseptic techniques, as well as various diagnostic procedures. TMNS Approved effective Autumn 2008.

Pre-reqs:

BIO122

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM230 ARGUMENTATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to rhetorical theory particularly as it relates to the theory and practice of argumentation. Students will have the opportunity to practice argumentation in academic debating and persuasive speaking. Students will also study the theoretical foundation of argumentation and its application in various contexts.

Pre-reqs:

Or Test & Score: ACT Composite - 22

Information Tech

Computer Science

Information Tech

Computer Science

WDD230 ADV FLASH ANIMATION AND DES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Learn to develop cartoon characters online and use them in web site marketing. Each aspect of character drawing taken step by step is concluded with developing a complete character. Various animation techniques are applied to the character culminating in a complete animation. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or WDD124

WDD229 ADVANCED WEB DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on creating and coding advanced web designs with HTML and CSS. Advanced graphic techniques are introduced. Hands-on projects take the student from an initial concept to a graphic mockup and finally to a complete web page.

Pre-reqs:

Or WDD122

Business/ Entrepreneurial

Business Mgt/Entrep

MGT224 HUMAN RESOURCE MGT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduction to the effective management of human resources in today's organizations. Emphasis is on the policies and programs necessary to attract, retain and motivate employees. Subjects covered include the legal framework of human resource management, staffing, human resource development, motivation and leadership, compensation, appraisal systems, safety and labor, and management relations. Upon completion, students should be able to demonstrate an understanding of the management of the human resource.

Pre-reqs:

MGT121

Engineering Tech

Engineering

Engineering Tech

Engineering

CET235 CONSTRUCT MGT/JOB COST AND SAF

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines the progression of a building project from its inception to completion along with the administration of it in the office and in the field. Contract law and the legal implications of documents will be discussed. The student will also be familiarized with specifications, shop drawings and computerized project control software.

Pre-reqs:

And ECA122

Health and Human Services

Dietary Management

NTR121 BASIC MEDICAL NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on the essentials of nutrition as required for health. The composition of foods, as well as the functions, sources and interactions of essential nutrients within the role of the human body's metabolic system are discussed. Assessment of nutritional health risks, along with health promotion and disease prevention is discussed. The influence of age, growth and normal development of the life stages are discussed in terms of the nutritional requirements. Methods of meeting dietary needs and sources of reliable nutritional information are addressed along with current nutritional issues and research.

Pre-reqs:

IDS102

Information Tech

Administrative Srv Off Applion

IRT230 BASIC BROADCAST CAPTIONING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to teach students the basics of broadcast captioning. The students will be evaluating their writing skills for captioning, learning captioning style guidelines, creating and managing captioning dictionaries, and the basic formats for writing news, sports, weather, and other broadcasts. Upon completion, students should be able to demonstrate knowledge of realtime/caption production.

Pre-reqs:

IRT122

Computer Security

Information Tech

Computer Security

NET265 UNIX/LINUX SHELL SCRIPTING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn how to combine standard UNIX commands and utilities together in Bourne style shell scripts for automation of system administration tasks and data manipulation and reporting. Emphasis is on redirection, looping, command substitution, redirection, process control and regular expressions. Other topics addressed include database interaction, various markup languages (LateX and HTML), perl, awk, and sed scripting.

Pre-reqs:

Or ECA277

CFS137 COMPUTER CRIME AND INVESTIGATN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides an overview of cyber crime and computer related crime issues facing businesses and the criminal justice system. Demonstrations and hands-on practice will reinforce topics such as how computers are used in crime, interview techniques, search warrants, evidence handling, chain of custody, identification and recovery of computer data, report writing, case preparation, and courtroom testimony. Upon completion, the students will be able to understand government response to cyber crime issues from a law enforcement perspective.

Pre-reqs:

NET120

Or ECA145

CFS275 ETHICAL HACKING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course, students learn to discover weaknesses in operating environments using the well known hacking methods. Students will acquire the knowledge to systemically test and exploit internal and external defenses. Students will learn the countermeasures used to mitigate and reduce risk to enterprise networks. Students will be taught how to crack security systems so they can advise organizations on how to protect their systems.

Pre-reqs:

And NET220

Or ECA145

Information Tech

Computer Security

CFS280 DIGITAL MEDIA FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The student will understand the methods and tools used in preserving, duplicating, imaging and validating data from peripheral devices such as cellular phones, PDAs, IPODs, and Blackberrys. In addition to this, attention will be given to the gathering of evidence from both hard wired and wireless networks devices. Students will practice the gathering of information from these devices using the appropriate methods and software to allow the information to be admissible in court.

Pre-reqs:

CFS137

Engineering Tech

Engineering

CET124 HIGHWAY AND MAP DRAWING

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Surveyors' notes are used by the student to develop and draw topographic and contour maps and plan-profile sheets for highway construction. Proper interpretation and uses of these drawings are also discussed.

Pre-reqs:

MTH125

CET225 SUSTAINABLE BDG SRVCE SYS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines sustainable storm water management, water supply and waste for buildings and how they can be designed to promote conservation, thermodynamics of buildings and how design of the envelope can reduce energy usage. HVAC system design for conservation and lighting design to maximize day-lighting and energy conservation.

Pre-reqs:

CET121 Can be Taken Concurrently

Engineering Tech

Engineering

CET232 LAND PLANNING AND DESIGN

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course covers the study of site capabilities and potentials as they relate to land planning and subdivision design. Students will complete preliminary layouts for projects such as industrial parks, housing allotments, planned unit developments and commercial home sites in accordance with zoning and subdivision regulations.

Pre-reqs:

Or CET124

And CET227 Can be Taken Concurrently

Information Tech

Computer Security

IMT249 TEXTURES FOR 2D AND 3D

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the creation of professional-quality textures for both 2D and 3D design. Upon completion of this course, students will learn the art and design in the creation of these textures and effects, including basic designs, shortcuts and creating environmental textures. Design skills covered in this course will allow students to proceed to designing textures for 3D gaming among other applications. Learning will be facilitated through a series of projects using current application design software.

Pre-reqs:

IMT125

Engineering Tech

Engineering/Applied

HVC235 REFRIGERATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A basic understanding of mechanical refrigeration from safety to cryogenics is presented. The refrigeration cycle, components, controls, in instrumentation, installation, servicing, and troubleshooting are studied. Various components including the compressor, condenser, filter-dryer, and refrigeration controls are studied in detail

Pre-reqs:

HVC122

Engineering Tech

Engineering/Applied

MST123 HYDRAULC AND PNEUMATIC APP

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course deals with the study of hydraulic applications, types of circuits used, how to pipe the various systems and how to troubleshoot the hydraulic/pneumatic circuits.

Pre-reqs:

And MST122 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

MTH223 ANALYTIC GEOMETRY-CAL I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of analytic geometry, limits, continuity, derivatives, tangent and normal lines, derivatives of trigonometric functions, related rates, Newton's method, Rolle's theorem, mean value theorem, extrema of functions, antiderivatives, definite integrals, indefinite integrals, areas and volumes. Key ideas and concepts will be presented from a variety of perspectives with a broad range of examples and applications. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the Trapezoidal Rule and Simpson's Rule for integration. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

MTH135

Or MTH125

Business/ Entrepreneurial

Business Mgt/Entrep

FAS123 VISUAL MERCHANDISIING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course acquaints students with the basic techniques of effective visual merchandising to include design, color principles, tools and materials of the trade. Emphasis will be placed on retail design, including history, terminology, components and the structure of visual merchandising products. Topics include: props and fixtures, lighting and signage, installation of displays, store planning, and safety techniques common to display work in retail presentation.

Pre-reqs:

FAS121

Accounting/Finance

Business/ Entrepreneurial

Accounting/Finance

ACC132 FINANCIAL ACCOUNTING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces the student to the fundamental processes of accounting through coverage of the accounting cycle consisting of transaction analysis, the recording function and financial statement preparation and analysis. Course coverage continues with a review of receivables; inventory, property, plant and equipment; bonds and stockholder's equity. Emphasis is given to why certain procedures are followed and their financial statement impact. Students may elect to take ACC121, Principles of Accounting, as an introduction to accounting prior to taking this course. TAG approved course- OBU001 effective Fall 2005.

Pre-reqs:

Or BUS124

Engineering Tech

Engineering

EET120 DC CIRCUIT ANALYSIS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Direct current (DC) circuit analysis. Topics include: voltage, current, resistance, Ohm's law, power, circuit reduction, Kirchhoff's laws, network analysis methods, network theorems, capacitors, inductors, transients and sine wave characteristics. TAG approved course- OET001 effective Summer 2007. CTAG CTEET001 Approved Spring 2012.

Pre-reqs:

Or MTH135 Can be Taken Concurrently

Sciences

Physics

PHY121A COL PHYSICS IA W ALG

Credit Hours: 2 Contact Hours: 2.5 Lecture Hours: 1.5 Lab Hours: 1 Other Hours: 0

Study of motion and force. Problem-solving in orientation, emphasizing the application of formulas, algebra, and trigonometry to physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TMNS approved Spring 2012.

Pre-reqs:

Or MTH125

Health and Human Services

Physical Therapy

Health and Human Services

Physical Therapy

PTA230 SEMINAR II

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Presentation of diverse clinical issues and approaches to patient management.

Pre-reqs:

And PTA229

PTA229 DIRECTED PRACTICE I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Clinical experience in various physical therapy departments under direct supervision. Grading: Credit/Fail

Pre-reqs:

And PTA224	Can be Taken Concurrently
And PTA228	Can be Taken Concurrently

Information Tech

Computer Science

CIS121 HELP DESK AND COMP SUP CONCEPT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides the student with essential topics covering help desk operations, roles and responsibilities of the analysts, help desk processes and procedures, tools and technologies, performance measures, and the help desk setting itself. There are numerous hands-on projects to practice implementing help desk concepts in a real world situation. Upon completion, students will have a skills to explore in greater detail various helpdesk tools, situations, and user conflicts and resolution.

Pre-reqs:

IDS102

Health and Human Services

Respiratory Therapy/MIST

Health and Human Services

Respiratory Therapy/MIST

RCT129 RESPIRATORY DISEASES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A review of diseases affecting the patients that are encountered by the respiratory care practitioner. Included is the physical assessment and evaluation of the patient with respiratory complications.

Pre-reqs:

RCT124

Information Tech

Computer Science

CSE122A PROGRAMMNG LOGCI & PROB SOLV A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with algorithm development, variables, sequential statements, and conditional statements. Upon completion students should have an understanding of the following concepts: algorithms, variables and data types, basic sequential statements, conditional logic and how to use them in program coding.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Or Test & Score: ACT Reading - 18

Administrative Srv Off Applion

AOT224 LEGAL OFFICE PROCEDURES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an introduction to the unique characteristics of law office organization and management with an emphasis on computer applications in law. A general introduction to nonlitigation responsibilities and fundamentals of grammar, style and letter writing are covered. Upon completion, students should be able to demonstrate an understanding of concepts and procedures in a law office.

Pre-reqs:

Or AOT130

Computer Science

Information Tech

Computer Science

CSE231B JAVA PROGRAMMING B

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to software programming logic and problem solving techniques using the Java programming language. Primary emphasis is on achieving familiarity with proper programming practices through awareness and application of structured programming principles and object-oriented concepts. ECA223B requires you to install the Java Development Kit (JDK) on your home computer or have access to computers somewhere else which have the JDK installed. Sequential, conditional and repetitive logic constructs are presented. The students learn how to write Abstract Data Types as a part of the object-oriented presentations.

Pre-reqs:

CSE231A

CSE234 ADVANCED C++ PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will complete a collection of hands-on lab exercises to create software using the Visual C++ programming language. Students will take advantage of the object-oriented approach to design, develop and utilize components using the Microsoft Component Object Model.

Pre-reqs:

Or CSE233

CSE228 ASSEMBLY LANGUAGE PROG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The relationship between software languages and computer architecture is presented. This course examines assemblers, specification and translation of programming languages, linkers and loaders, block structure languages, parameter passing mechanisms and a comparison of programming languages. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or CSE231

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ARL133 CNC MACHNG CTR PROG-CONV FRMT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This Computer Numerical Control course provides the core knowledge to read, understand, and edit the various programming formats used in standard Conversational, Mazatrol, and Macro types of programming used in machining center operations. With assigned lab projects, the student will reinforce the concepts covered.

Pre-reqs:

ARL129

Business/ Entrepreneurial

Accounting/Finance

ACC225 AUDITING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Emphasis is placed on the philosophy and environment of the public accounting profession, with special attention paid to the nature and economic purpose of audit and assurance services, professional standards, professional conduct, legal liability, audit evidence, audit planning, consideration of internal control, audit sampling, audit workpapers and SOX compliance.. Upon completion, students should be able to demonstrate competence in applying the generally accepted auditing standards and the procedures for conducting audits of public and non-public companies.

Pre-reqs:

ACC222 Can be Taken Concurrently

Health and Human Services

Respiratory Therapy/MIST

RCT224 CLIN PRAC CRIT CARE/SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

Clinical experiences provided include an exposure to invasive and non-invasive ventilatory management, arterial punctures, and other procedures related to the care of the critically ill patient. Experiences are also provided in specialty care areas of respiratory care. The seminar component consists of EKG monitoring and cardiopulmonary stress testing.

Pre-reqs:

RCT128

Information Tech

Computer Science

Information Tech

Computer Science

CPD122 ORACLE DTBSE: INTRO TO SQL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces Oracle Database technology and the relational database concepts and the powerful SQL programming language. This course provides the students with the essential SQL skills of querying the database, the meta data and creating database objects. This course is designed to prepare you for the corresponding Oracle Certified Professional exam. Demonstrations and hands-on practice reinforce the concepts. Upon completion, the student should have the confidence and skill to develop, maintain and utilize SQL scripts and code.

Pre-reqs:

Or CPD121

CPD225 DATA MINING AND DATA WARHOUSNG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides a thorough practical coverage of the techniques used to build a warehouse including requirements definitions, extract-transformation-loads of data, query applications and executive information systems. Additionally, data mining algorithms and techniques that identify expected and unexpected trends in data stored in a warehouse will be covered. Upon completion students will be able to design, implement and use a data warehouse and use data mining tools to analyze and identify patterns in data.

Pre-reqs:

Or CPD121

CPD121 DATA MODELING AND DATABSE DSGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces database concepts and describes how to properly design, create and interface with a relational database. The course begins with definition of important terms. It demonstrates the specific rules that one must follow to design and create a normalized relational database. SQL is also an important topic. Students complete a collection of hands-on labs to learn how to apply the techniques presented.

Pre-reqs:

IDS102

Information Tech

Computer Science

CPD224 ADV MICROSFT SQL SRVR DTBSE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course students will gain the knowledge and skills to design server-side solutions for Microsoft SQL Server. The course focuses on teaching students the skills of database developers who are individuals who work in enterprise environments to identify and place database technologies during design to achieve a suitable solution that meets the needs of an organization. Students will also learn to consider the solution from a system-wide view instead of from a single database or server perspective.

Pre-reqs:

Or CPD222

SGE121 GAME DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Categories of video games, design principles related to different processing platforms, current animation techniques, and current software packages available for creation of video games are all major topics. The focus of this course is to familiarize the student with design technologies and software available to implement animation used for video games. The student will gain an overall view of the gaming industry.

Pre-reqs:

IDS102

SGE223 2D GAME DESIGN AND DEVELP

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on 2D game programming. The student will learn the essentials of 2D game programming, including basic algorithms, collision detection and mathematic algorithms.

Pre-reqs:

Or CSE233

Information Tech

Computer Science

CSE232 ADVANCED JAVA PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Design, creation, testing, deployment, maintenance and support of software applications using Sun Microsystem's Java language are illustrated through a collection of practical, hands-on lab exercises and lectures. Applications focus on the multi-threaded, networking and multimedia aspects of the Java language. Helps prepare students for specific Sun Microsystem certification test: Sun Certified Programmer for the Java Platform.

Pre-reqs:

ECA223

Educ/ Liberal Arts/ Math

Mathematics

MTH094 Intermediate Algebra II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline, but especially for those that will eventually pursue a Bachelor's degree. Topics to be covered are factoring; rational expressions; roots and radicals; and quadratics.

Pre-reqs:

Or Test & Score: M093 Transfer Prof/Placement - 2

MTH124A Statistics, Module A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

Or MTH123

Or Test & Score: M093 Transfer Prof/Placement - 2

Health and Human Services

Nursing

Health and Human Services

Nursing

NUR222 NUR CARE PERSON/ALT II

Credit Hours: 8 Contact Hours: 15 Lecture Hours: 4 Lab Hours: 11 Other Hours: 0

This course provides for further development and application of concepts in nursing of persons experiencing alterations in health. Principles in oncology nursing are introduced. The course examines the basis of a therapeutic relationship between the nurse and the client. Integrated within the course is the use of the nursing process with clients with common alterations in psychosocial health.

Pre-reqs:

Or NUR123

And PSY123

Fire and EMS

FST230 FIREFIGHTER 2

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 4 Lab Hours: 3 Other Hours: 0

This course meets the requirement in the Ohio Revised Code regarding the certification of level 2 Firefighter. Instruction includes topic areas taken from NFPA 1001 Fire Fighter 2. This course can be used as the second step in a two-step process in becoming a Firefighter trained to the Firefighter level 2. Successful completion of this course is required to take the state certification test at Firefighter level 2. A student must have a Firefighter level 1 certification to register for this course.

Pre-reqs:

FST129

Information Tech

Administrative Srv Off Applion

AOT132 RECORDS MANAGEMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an introduction to the fundamentals of a records and information management program. Emphasis is placed on learning and applying standard rules for alphabetic storage and retrieval; including the subject, numeric, and geographic filing methods. Also covered are basic concepts of a records management program and its system components as well as current electronic trends. Upon completion, students should be able to demostrate an understanding of the components of a records management program and competence in applying the generally accepted standard filing rules.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Sciences

Biology

Sciences

Biology

BIO101 INTRO TO ANAT AND PHYSIO

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Provides understanding of human structure and function of all body systems. Focus will be given to beginning chemistry principles, cells and tissues. This course is for the student who has little or no background in human anatomy and physiology. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Business/ Entrepreneurial

Business Mgt/Entrep

BUS221 MICROECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An in-depth study of microeconomic concepts and principles such as supply and demand, price elasticity, production costs, different market structures, income distribution, marginal analysis, and other issues relating to global economics. Upon completion of this course, students should be able to demonstrate an understanding of these topics and be able to apply them to business. TAG OSS004 approved Spring 2012. TMSBS approved Spring 2012.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Accounting/Finance

FIN123 FUND FINANCIAL SERVICES

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces the student to the discipline of personal financial planning and to the various services which support the planning process. The tools and techniques of those services are addressed from two perspectives: (1) a professional occupation and (2) individuals developing and implementing their own long-range financial plan. Specific topics include understanding the financial planning process, ethical and professional considerations in financial services, and introductions to the fundamentals of credit, insurance, investments, and retirement and estate planning. Upon successful completion of this course, the student should understand the fundamental concepts of personal financial planning.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Educ/ Liberal Arts/ Math

Education

Educ/ Liberal Arts/ Math

Education

EDU221 LANGUAGE ARTS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Examines strategies and techniques for supporting and encouraging young children's emerging literacy development, including pre-writing/writing, pre-reading, reading and language development. Includes orientation to children's literature, application of the whole language approach and utilization of children's interest. Ten observation hours required.

Pre-reqs:

EDU122

Business/ Entrepreneurial

Business Mgt/Entrep

ENT120 ENTREPRENEURSHIP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to the entrepreneurial process from conception to birth of a new venture. Students will examine elements in the entrepreneurial process--personal, sociological, and environmental--that give birth to a new enterprise. Critical factors for starting a new enterprise such as alternative career prospects, family, friends, role models, the state of the economy and the availability of resources will be explored. Students will be introduced to practical tools they can use to further their careers in business, both in entrepreneurship and in more traditional company environments. This course simulates the experiences that entrepreneurs undergo in conceiving, launching, and operating new businesses. The courses enables students to evaluate an entrepreneurial career for themselves. In doing so, it provides want- to-be entrepreneurs with a framework for selecting, funding, and starting their own new ventures.

Pre-reqs:

Or ENG102

Educ/ Liberal Arts/ Math

Education

EDU221 LANGUAGE ARTS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Examines strategies and techniques for supporting and encouraging young children's emerging literacy development, including pre-writing/writing, pre-reading, reading and language development. Includes orientation to children's literature, application of the whole language approach and utilization of children's interest. Ten observation hours required.

Pre-reqs:

Or ECE122

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

PSY222 Psy Aspect of Therapy

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Covers the general principles of interaction with a specific focus on those unique challenges confronting the patient and the health care provider. Attention is given to the psychosocial needs of both the patient and the health care provider. Issues of communication, patient-provider relationships, patient dependency, personal values, and relating to people from differing cultures, ages, and special needs are discussed.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Compass Reading - 080

Education

EDU228 PHONICS FOR YOUNG CHILDREN

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Explores the theory and role of phonics and phonemics awareness as well as current research regarding phonics instruction. Five observation hours required.

Pre-reqs:

Or ECE221

Health and Human Services

Human Services

CDC221 CHEM DEPENDNCY AND THE FAM

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an overview of how chemical dependency impacts individual family members and the family unit. The course emphasizes how to define co-dependency and treatment of family members. Students explore developmental aspects of the family, family roles, and the ways in which addiction alters family functioning. Students are exposed to a variety of family treatment models as well as 12-Step/mutual self-help programs for family members. Students are required to attend one 12-Step meeting for families with addicted members and complete a related assignment.

Pre-reqs:

SWK125

Health and Human Services

Human Services

CDC223 CHEMICAL DEPENDENCY AND PREVNT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course provides specific content in preventing and delaying the onset of alcohol and other addictive substance use, abuse, and dependency. Students learn prevention strategies and programs that help individuals, families, and communities promote safe and healthy behavior and lifestyles.

Pre-reqs:

SWK125

SWK124 METHODS IN PRACTICE I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Fosters development of focused and group interviewing skills and examines principles and practices relating to the entire case management process. Assessment and documentation cover a diverse range of professional human and social service settings, emphasizing compliance to professional and governmental standards.

Pre-reqs:

SWK121

Educ/ Liberal Arts/ Math

Criminal Justice

CJS129 CORRECTIONS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines community and institutional corrections in the United States. Topics include the history and goals of punishment, supervised release, intermediate sanctions, institutional administration, and issues in corrections. TAG approved Spring 2012 OSS033.

Pre-reqs:

CJS121

Educ/ Liberal Arts/ Math

Criminal Justice

PLS224 CRIM LAW AND PROC FOR PARALGL

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on criminal law and criminal procedure, with an emphasis on the paralegal's roles and responsibilities in criminal cases. Topics include the structure and functions of the legal system, the historical development of the criminal law, the elements of major crimes and defenses, and relevant issues in criminal procedure.

Pre-reqs:

PLS121

Education

EDU130 INTRO TO THE TEACHING PROFESSN

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This survey course is an introduction to the teaching profession. Students engage in a variety of experiences that broadly explore the purposes of schools in society and the knowledge, dispositions, and performances required to be an effective teacher today. Ten observation hours required. TAG approved course OED001, effective Summer 2013. CTAG approved course CTED001, effective Summer 2013.

Pre-reqs:

Or ENG011

Health and Human Services

Medical Lab

MLT225 MLT APPLICATIONS

Credit Hours: 3 Contact Hours: 9 Lecture Hours: 0 Lab Hours: 9 Other Hours: 0

Under supervision of MLT Program faculty, the student has the opportunity to practice the manual procedures from the previous MLT courses. In preparation for the affiliated hospital experience, the student will organize his/her daily workload to maximize productivity and attain competence in the manual methods. Emphasis is placed on manual hematology, normal and abnormal blood smears, routine urinalysis, body fluid cell counts and cytospins, routine serology, blood banking using tube and gel techniques.

Pre-reqs:

MLT223

Health and Human Services

Medical Lab

MLT227 MLT SEMINAR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Topics include professional development, creating resumes and cover letters, discussions of experiences at the clinical sites, discussions of problems that occur in the workplace and problem resolution. The topics of the certification process, professional ethics in the laboratory, and other related topics are included.

Pre-reqs:

And MLT226 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Social Sciences

PSY229 PSYCHOLOGICAL METHODS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course serves as the keystone experience for those pursuing the Associate of Arts in Psychology. This course synthesizes previous course work to allow the student an opportunity to demonstrate understanding and competency of broad psychological concepts. Additionally, students are provided the opportunity to apply this understanding through exploring concepts of interest within the field by conducting and producing an empirical study. Systematic guidance is provided throughout the course to assist students in understanding the process.

Pre-reqs:

And PSY220

Information Tech

Computer Science

CSE225 CROSS-PLATFORM MOB APP DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines the various methods for developing mobile applications that are compatible with various operating systems. Coding with frameworks that allow for deployment across different systems will be conducted. Upon completion of the course, students should understand how to create mobile applications that will function on different mobile and handheld devices.

Pre-reqs:

Or WDD222

Or WDD221

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY133 CLINICAL DENTAL HYG I

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 0 Lab Hours: 8 Other Hours: 0

Supervised clinical patient care experiences which reinforce fundamentals, correlate with, and allow the application of, dental procedures and concepts presented in Dental Hygiene Theory I. Emphasis on application of basic skills and professionalism.

Pre-reqs:

And DHY123

DHY233 DENTAL HYGIENE THEO III

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Further exploration of treatment modalities and adjunct procedures is covered. The course focuses on transitions to practice, including principles of office management, jurisprudence, ethics and current issues in dental hygiene.

Pre-reqs:

DHY231

Sciences

Biology

BIO123 PRIN OF HUM STRUCT AND FUN

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 4 Lab Hours: 3 Other Hours: 0

A one-semester accelerated anatomy and physiology course which introduces the human body at the chemical, cellular, tissue, organ and system levels of organization. Emphasis is placed on the relationships and maintenance of homeostasis between the systems. The laboratory includes microscopic study of tissues, detailed study of the human cadaver and preserved mammalian organs, conduction of wet labs, and the application of selected physiological processes.

Pre-reqs:

BIO101

Information Tech

Computer Science

Information Tech

Computer Science

WDD121 INTERNET/INTRANET DES & DEV A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to the overall methodologies of developing web sites. The history of the Internet, fundamentals of web design, the HTML markup language, and the CSS style sheet language will be studied. Specific topics covered include the basic HTML webpage, configuring text and color with CSS, adding images, and best practices in web design. Upon completion of this course, students should have an understanding of the web design and development process and be capable of hand coding a basic static website.

Pre-reqs:

Or Test & Score: Computer Test - 18

Engineering Tech

Engineering

MST126 PIPEFITTING PRINC AND APPLIC

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

Piping systems, valves, fittings, metal piping and non-metallic piping are identified and their use and maintenance are presented. Strainers, filters, traps and other accessories such as pressure and temperature gauges are discussed in detail, including a detailed description of their operation and required maintenance. The procedures, use, and application of the BOCA basic plumbing code is also covered.

Pre-reqs:

Sciences

Physics

PHY121 COL PHYSICS I W ALG

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Study of motion, force, momentum, energy, mechanical advantage, structure and properties of matter, fluids, heat. Problem-solving in orientation, emphasizing the application of formulas, algebra, and trigonometry to physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TAG approved course- OSC021(Not for Physics majors) approved Spring 2008. TAG approved course - OSC014 (not for Physics majors) approved Spring 2008. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or MTH125

Health and Human Services

Respiratory Therapy/MIST

Health and Human Services

Respiratory Therapy/MIST

RCT226 Adv Resp Care Procedures Lab

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

An orientation and practice of advanced respiratory care procedures such as intubation, noninvasive ventilation, assisting with special procedures, and respiratory care specialty areas.

Pre-reqs:

RCT126

Business/ Entrepreneurial

Business Mgt/Entrep

MGT235 Facility & Event Mgt for Sport

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides students with an understanding of sports facility and event management. Sports facility management consists of identifying goals of the event and coordinating people in the organizations involved to achieve those goals. Sports facility management consists of planning and designing a sports facility, staffing of management, facility marketing, developing revenue streams, facility scheduling, and general facility maintenance in order to host the sporting events.

Pre-reqs:

MGT121

Information Tech

Administrative Srv Off Applion

AOT226 SHRSHEET MICROSFT EXCEL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers spreadsheet applications on the microcomputer using the Microsoft Excel program. Upon completion, students should be able to demonstrate proficiency in using MS Excel in an office setting to solve common business problems.

Pre-reqs:

ITD100

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV223 BASIC GEOLOGY/HYDROLOGY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the basic components of the earth, and will include a study of its interior, minerals, rock structure, weathering and mass movement. Basic soil properties, testing, and topographic maps will be studied. The properties and flow patterns of water in both surface and subsurface conditions will be considered with emphasis placed on how hazardous materials are spread from a contaminated site.

Pre-reqs:

MTH107

Educ/ Liberal Arts/ Math

Mathematics

MTH124A Statistics, Module A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

MTH093

MTH125A COLLEGE ALGEBRA A

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Study of linear, quadratic and absolute value equations and inequalities, graphs of elementary functions and non-functions. TMM001 approved Spring 2012.

Pre-reqs:

And MTH094

Or Test & Score: ACT Math - 22

Educ/ Liberal Arts/ Math

Mathematics

MTH125 COLLEGE ALGEBRA

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will study linear, quadratic and absolute value equations and inequalities by applying analytical, graphical, and numerical methods of solution. Elementary functions and non-functions will be examined with reference to extrema, roots (zeros) and end-behavior of their respective graphs. Theory of equations including the Remainder and Factor Theorems, The Rational Root Theorem, and Descartes' Rule of Signs will be used for non-graphical analysis of polynomial functions of degree n. The student will also study exponential and logarithmic functions and the conic sections including their graphs and applications. Systems of equations will be solved by traditional algebraic methods as well as by the application of matrix algebra including determinants. These methods will be extended to include the partial fraction decomposition of rational expressions. TMM001 approved Spring 2012.

Pre-reqs:

Or Test & Score: ACT Math - 22

Education

EDU227 EARLY CHLD ED TECH PRACTICUM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

A 210-hour, supervised experience working in the early childhood education/caregiving setting. Open only to Early Childhood Education Technology majors. Weekly seminar participation required.

Pre-reqs:

EDU128

Mathematics

MTH106 Math for Technology

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed for students in computer science and information technology. Areas of focus will include: sets and Venn diagrams, numbering systems, logic, graphs, greedy algorithms, counting principles, combinatorics, discrete probability, sequences, and series.

Pre-reqs:

Or Test & Score: Compass Algebra - 039

Educ/ Liberal Arts/ Math

Mathematics

MTH094 Intermediate Algebra II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline, but especially for those that will eventually pursue a Bachelor's degree. Topics to be covered are factoring; rational expressions; roots and radicals; and quadratics.

Pre-reqs:

MTH093 Can be Taken Concurrently

Education and Human Serv

Education

EDU132 Observ, Assess, Group Mgt

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to authentic and formal tools and strategies used in early childhood settings to appropriately assess, plan, and guide young children. Topics include methods of observation, recording growth, development and behavior, interpreting assessment data, influence of culture, and child guidance and group management with an emphasis on fostering self-discipline and pro-social skills. Ten observation hours are required.

Pre-reqs:

Or Test & Score: ACT English - 16

Business/ Entrepreneurial

Automotive

TOY204 Toyota Engine Controls II

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This course is designed to increase the student's understanding and diagnostic skills related to advanced Toyota engine control systems. Major areas to be covered are the identification, operation, function, and diagnosis of the following: Electronic Control Module (ECM); fuel injection systems; engine control system sensors and actuators; ignition systems; electronic throttle control systems, evaporative emission systems, variable valve timing, direct fuel injection systems, and EGR systems. Emphasis will be on solving advanced drivability concerns using all available resources: Toyota Information Systems, DVOM, oscilloscope, Toyota scan tool, and any related special service tools. In this course students will learn students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Upon successful completion of this course students will be prepared to take ASE tests A-8 (Engine Performance) and L-1 (Advanced Engine Performance).

Pre-reqs:

TOY105

Information Tech

Computer Science

Information Tech

Computer Science

CIS125 DATA ANALYSIS AND DECISION MAK

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on key technological areas used for the analysis and transforming of data into actionable information. Students will learn advanced database and data manipulation concepts relating to the storage, retrieval, and analysis of information. Popular tools will be utilized to evaluate various data sources, define business dimensions, store transactions, produce results and transfer data. Upon successful completion of this course, students will be prepared to leverage the power of these tools to perform data analysis.

Pre-reqs:

ITD122

CIS223 IT PROJECT MANAGEMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will be involved in the design, development, and management of various IT projects. Using these hands-on labs, students will develop a competency and professionalism in IT project management including the necessary business knowledge, interpersonal skills, and project management skills required to successfully manage IT projects. Topics in this course incorporate universal project management principles, and include important skills such as conflict resolution, negotiation, communicating, team building/leadership, and setting and managing expectations. Upon completion, students will have skills to explore the greater detail various project management tools, such as scheduler, spreadsheets, and databases. This course helps prepare students for the Comp TIA IT Project+ certification test.

Pre-reqs:

And CPD121

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

Or WDD221

Health and Human Services

Physical Therapy

Health and Human Services

Physical Therapy

PTA224 PTA PROCEDURES II ORTHO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected orthopedic, integumentary, rheumatological and cardiovascular conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

And PTA229 Can be Taken Concurrently

PTA225 PTA PROCEDURES II NEURO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected cardiovascular, integumentary, neurological, developmental, and traumatic conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

And PTA224 Can be Taken Concurrently

Fire and EMS

EMS124 PARAMEDIC I CLINICAL

Credit Hours: 2 Contact Hours: 12 Lecture Hours: 0 Lab Hours: 12 Other Hours: 0

This course is a co-requisite to Paramedic I, EMS122. It consists of the clinical and infield internship component related to the course content and skills completed in lab sessions during Paramedic I. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

And BIO101

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

AET222 SOLAR PHOTOVOLTAIC SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course explores the operation, design, installation, maintenance, performance estimating, site selection considerations and troubleshooting of solar photovoltaic systems for consumer and commercial applications. The course prepares students for the North American Board of Certified Energy Practitioners (NABCEP) Photovoltaic (PV) Entry Level Exam. This course explores the following topics: Photovoltaic markets and applications, photovoltaic system safety, fundamentals of photovoltaic solar energy, photovoltaic system components and array sizing principles, photovoltaic system electrical and mechanical design, photovoltaic system performance analysis, maintenance and troubleshooting and system selection for specific climates and applications.

Pre-reqs:

AET221

Business/ Entrepreneurial

Automotive

AUT257 AUTO AFTERMKT VEH CHASSIS MOD

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course provides students with the preparatory experience required to perform vehicle chassis modifications. Students will be exposed to current automotive aftermarket industry standards. Attention to detail is reinforced throughout student projects. This course concentrates on the modification of vehicle suspension geometry, ride height, alignment angles, tire and wheel combinations, springs, and suspension dampening components through the application of automotive aftermarket accessories and practices.

Pre-reqs:

AUT124

Engineering Tech

Engineering/Applied

CDL123 COMM DRIVERS LICENCSE-CLASS A

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 0 Lab Hours: 0 Other Hours: 8

This course will provide the student with the instruction and requirements needed to take the Ohio CDL Class A driver's license examination. Instruction will include behind the wheel range and street practice. A CDL test vehicle (tractor and trailer) will be provided for the CDL skills test. Students must be at least 18 years of age and able to provide a valid Ohio State Driver's License with minimum two years experience, proof of U. S. Citizenship (birth certificate and Social Security card), meet minimum Department of Transportation (DOT) medical and vision standards and pass a DOT drug screen. Individuals seeking the (H) endorsement are required to undergo a security threat assessment and obtain clearance from the Transportation Security Administration (TSA).

Pre-reqs:

Information Tech

Computer Science

Information Tech

Computer Science

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

And CPD121

Computer Security

NET281 FIREWALL AND NETWORK SECURITY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides the technology essentials for a web developer to design and develop secure E-Commerce solutions. Techniques such as the Luhn Algorithm and 128 bit encryption will be explored and implemented.

Pre-reqs:

NET137

IMT244 DIGITAL PAGE LAYOUT AND DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course offers the student a foundation in layout and design for advertising, marketing, newsletter, and other publication materials. Emphasis on design principles for the creation of advertising and publishing materials such as letterheads, business cards, ads, fliers, brochures, and manuals. This capstone course will allow students to master design principles through the use of typography, effective use of color, special graphic effects and output considerations. Students will gain these skills through a series of hands-on projects utilizing Adobe inDesign.

Pre-reqs:

IMT131

And IMT253

Health and Human Services

Respiratory Therapy/MIST

Health and Human Services

Respiratory Therapy/MIST

RCT223 PATIENT ASSMNST AND MONITOR

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Exposure to various procedures and techniques associated with the monitoring and evaluation of the patient with cardiopulmonary disease, with particular focus on hemodynamic monitoring of the critically ill patient.

Pre-reqs:

RCT220

Educ/ Liberal Arts/ Math

Education

EDU224 EARLY CHILDHOOD PROG ADM

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Examines key aspects of starting and operating various types of early childhood programs. Policies/procedures, legalities, supervision, finances, planning and organizing, and personnel management are emphasized.

Pre-reqs:

Or EDU121

Business/ Entrepreneurial

Accounting/Finance

ACC229 COMPUTERIZED ACCTG APPLICATONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course involves the application of the student's accounting knowledge in a computerized setting. The student will record and report accounting information using various commercial accounting packages, including but not limited to QuickBooks Pro and Excel, and practice in problem solving and meeting project deadlines throughout the course. Upon completion, the student should have a functional knowledge of computerized accounting applications and procedures.

Pre-reqs:

And ACC121

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

MST134 HYDRAULIC AND PNEUMATIC SYS

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course is a combination of MST122 and MST123 and is the study of fluids, their properties, behaviors and applications. Topics include: basic hydraulic and pneumatic pumps, actuators, valves, piping, hydraulic and pneumatic applications, the various types of hydraulic and pneumatic circuits, and how to troubleshoot these circuits.

Pre-reqs:

Or MTH093 Can be Taken Concurrently

IET270 DIM METROLOGY AND INSPECT I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an in-depth study of measuring principles, instruments, and techniques. The measuring instruments most commonly used in industry, including coordinate measuring machines, are covered. Emphasis is placed on proper use of equipment in terms of prevention and minimization.

Pre-reqs:

And MTH094

Or Test & Score: M093 Transfer Prof/Placement - 2

Health and Human Services

Respiratory Therapy/MIST

MIS124 MEDICAL INSTR STERILIZATION I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 0 Other Hours: 0

This course presents the student with an overview of the technical functions of the field of central processing/medical instrument sterilization and its application to hospital/surgical center environments. Topics include orientation to the work environment, decontamination procedures, infection control, disinfection, surgical instrumentation and standards of practice.

Pre-reqs:

BIO101 Can be Taken Concurrently

Health and Human Services

Respiratory Therapy/MIST

MIS127 MIS II/DIRECTED PRACTICE

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 0 Lab Hours: 15 Other Hours: 0

This course provides the student the technical competency skills in sterilization procedures, assembly of instruments, standards of practice, operations, inventory, distribution and product standardization. Students gain technical skills through exposure to the central service processing area in a hospital/surgery center.

Pre-reqs:

And MIS126 Can be Taken Concurrently

Dietary Management

DTR121 FOOD SCIENCE PRINCIPLES

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

The interdisciplinary topics of food science and technology are covered, including: food biology and chemistry, food engineering and the physics of foods. The course also covers food commodities and the composition of food with an emphasis on the functional properties of food, as well as the food laws and regulations. The physical and chemical properties of food are examined during lab along with the area of sensory evaluation of food products and the development of food products. Processing methods are taught in lab with a correlation to microbiology and fermentation, food handling, safety, food contamination, HAACP principles and toxicology.

Pre-reqs:

CHM101

DTR123 APPLIED NUTRITION

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers the basic application of nutrition assessment to all patients. It also involves the charting of medical records using the current Medical Nutrition Therapy terminology. Along with the process of assessment, the student will learn interviewing techniques and counseling strategies. Nutrition education is introduced using the food exchange lists, nutrition surveys, and the dietary standards.

Pre-reqs:

And DTR223 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH221 CONCEPTS OF CALCULUS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A study of the theory and techniques of analytic geometry, differential and integral calculus, including variables, functions, limits, differentiation, integration and applications of the derivative and integral.

Pre-reqs:

Or Test & Score: ACT Math - 27

Health and Human Services

Massage Therapy

MAS122 MASSAGE THERAPY II

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

This course is a continuation of Massage Therapy I. Students continue to practice procedures necessary to complete a full-body therapeutic massage with an introduction to clinical applications. Students perform massage in a supervised, clinical setting.

Pre-reqs:

MAS121

Physical Therapy

PTA222 PTA PROCEDURES II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

This course will present to the students the impairments, disabilities, functional limitations, and interventions of selected musculoskeletal, rhematological and cardiovascular conditions including spinal disorders and amputation. Also included, will be an overview of CNS anatomy, physiology, and pathology, sensory integration, motor development and motor control. Laboratory activities, written assignments and competencies, are required components of this course. Students will perform selected therapeutic interventions with patients under direct PT/PTA supervision as part of laboratory component of this course.

Pre-reqs:

And PTA229 Can be Taken Concurrently

Occupational Therapy

Health and Human Services

Occupational Therapy

OTA123 PSYCHOSOCIAL ASPECTS OF OT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Introduction to various health-promoting and inhibiting factors as they relate to occupational therapy practice. Provide training related to one-on-one and group treatment for individuals with psychiatric and/or social impairments. Emphasis on utilizing therapeutic use of self, adapted activities, and the environment as the primary means of promoting psychological well-being and enhancing occupational performance.

Pre-reqs:

And PSY121

OTA221 DEVELOP ASPECTS IN OT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Identification and description of handicapping conditions existing from birth or through adulthood. Instruction in occupational therapy theories and treatment for individuals with developmental and learning impairments. Emphasis on therapeutic techniques to enhance occupational performance from birth through adulthood.

Pre-reqs:

And BIO123

Business/ Entrepreneurial

Automotive

AUT234 ALT FUELS & ADV AUTO TECH

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed to provide the student with an understanding of alternative automotive fuels and the advanced technologies associated with fuel conversion and hybrid propulsion systems. Technologies addressed in the course will include diesel, compressed natural gas (CNG), liquid petroleum gas (LPG), methanol, ethanol, E-85 (bi-fuel vehicles), hydrogen, solar, electric propulsion, hybrid propulsion, and fuel cells. The description, application, and characteristics of alternative fuels will be covered. The course presents the history, legislation, regulations, safety, and the environmental impact associated with alternative fuels and those anticipated in the near future. Vehicle design and modification as it relates to alternative fuel systems will be studied as well as the storage and distribution of alternative fuels.

Pre-reqs:

AUT223

Business/ Entrepreneurial

Automotive

AUT186 CAT MASTS AND LIFT MECHANISMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The purpose of this course is to provide the student with an understanding of the skills and procedures necessary to accurately diagnose and repair masts used on lift trucks. It covers the purpose of the mast as it relates to powered industrial trucks. The student will be able to identify components and explain their function and operation. The course includes basic steps to visually inspect the mast and diagnose and correct problems with the mast assembly. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. The course concludes with a description of routine maintenance procedures, troubleshooting guidelines, and a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121	Can be Taken Concurrently

AUT225 AUTO DRIVETRAIN 1

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course precedes, but is taught in conjunction with, Automotive Drivetrain II. The purpose of this course is to give the student a sound knowledge of the operation of vehicle transmission and drivetrain systems. The course is divided into three sections: (1) Clutches and Flywheels; (2)Manual Transmissions; and (3) Final Drive Assemblies. Included in the course is student laboratory experience in the (a) identification and diagnosis; (b) dismantling and repair; and (c) reassembly and adjustment of all components used in modern manual transmission systems.

Pre-reqs:

AUT121	Can be Taken Concurrently

AUT276 HONDA AUTOMATIC TRANSMISSIONS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers Honda-specific diagnostic and repair techniques necessary to service Honda automatic transmissions. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper automatic transmission inspection and repair procedures. Hands-on practice will enable the students to apply these concepts to Honda vehicles.

Pre-reqs:

AUT226	Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

AUT283 CAT FUEL SYSTEMS (LP/GASOLINE)

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed to provide the student with an understanding of the skills and procedures necessary to accurately diagnose and repair gasoline and LP fuel systems used on CAT lift trucks. Included in this course are K21-K-25, GM4.3L, and TB45 fuel systems. On-unit diagnosis of mechanical and electronic fuel control systems will include the use of traditional fuel diagnostic equipment and CAT-fuel system specialty tools. The importance of safety and proper handling of LP and gasoline fuel system components will be stressed in every segment of this class. The instructor will demonstrate CAT LP and gasoline system diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. The course concludes with a self- assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121	Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

AOT128 DPT-MICROSOFT PUBLISHER

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts and applications of desktop publishing using Microsoft Publisher. Emphasis is placed on the creation of various types of high-quality documents that combine text and graphics. Upon completion, students should be able to design and produce professional business documents and publications.

Pre-reqs:

Or ITD122

AOT238 WEB DESIGN FOR OFFICE PROF

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, design, and application for web-page publishing. Students will produce web pages by combining text, graphics, and scanned images. Upon completion, students will be able to design and produce professional web pages using advanced publishing features.

Pre-reqs:

Or BCA220

Or AOT131

Health and Human Services

Dietary Management

Health and Human Services

Dietary Management

DMA124 NUTRITION MED NUTR THER EXP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 2 Lab Hours: 0 Other Hours: 1

This course provides Nutrition and Medical Nutrition Therapy (MNT) experience in an off-campus facility. This experience is intergrated with the academic instruction of DMA 123, directly supervised by a registered Dietician, licensed in the state of Ohio. Students apply the concepts of Medical Nutrition Therapy to practical situations within the dietary management facility.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

SOC230 Applied Sociological Methods

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce students to basic sociological research, and test their proficiency in applying theory, research methodologies, and data analysis. The course begins with a brief synopsis of sociological theories and perspectives that can be used to identify and frame social problems and issues. A variety of quantitative and qualitative research methods will be introduced, and a number of statistical analytic techniques will be presented as options for consideration in data analysis. Throughout the course, students will be expected to isolate a problem or issue amenable to sociological analysis and develop a research project in order to demonstrate proficiency in applied sociological research.

Pre-reqs:

And SOC225

English

ENG124 COLLEGE COMPOSITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course emphasizes writing based on reading response with review of essay development, grammar, and punctuation. Emphasis is on the process of drafting, revising, and editing to achieve clarity. A research project requires APA or MLA documentation. TMEC Approved effective Autumn 2008.

Pre-reqs:

Or ENG105

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH105 Math for Allied Health

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to provide health science students with the mathematical skills and concepts required to be successful in allied health fields. Topics covered in this course will be: allied health applications, metric conversions, apothecary and household systems, systems of measurements, use of formulas, dimensional analysis, percent, decimals, fractions, ratios and proportions, direct and inverse variation, solutions, dosage calculations, allied health graphs, scientific notation, and statistical concepts.

Pre-reqs:

Or MTH100

MTH107 Industrial Math

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the topics of elementary mathematics needed for applications in the vocational and technical curriculum. The operation and use of the scientific calculator as a problem solving tool will be emphasized. Topics include: basic concepts, fractions, the metric system, measurements, polynomials, basic right angle trigonometry, ratios and proportions, geometry, oblique triangles, the law of sines and law of cosines.

Pre-reqs:

Or MTH100

Sciences

Physics

PHY125 ASTRONOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This class is a study of fundamentals of astronomy. Topics include: the solar system, planets, stars, galaxies, and the universe. This course is a comprehensive survey of astronomy designed primarily for the non-science major. Pivotal discoveries discussed in class are reinforced through lab activities that replicate topic-related studies. This course should provide the student with an understanding of the nature of the universe and insight into the scientific fields that provide the evidentiary basis for modern cosmological theories.

Pre-reqs:

Or Test & Score: ACT Math - 22

Sciences

Physics

PHY121A COL PHYSICS IA W ALG

Credit Hours: 2 Contact Hours: 2.5 Lecture Hours: 1.5 Lab Hours: 1 Other Hours: 0

Study of motion and force. Problem-solving in orientation, emphasizing the application of formulas, algebra, and trigonometry to physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TMNS approved Spring 2012.

Pre-reqs:

And MTH130

Engineering Tech

Engineering/Applied

ENV163 WATER/WASTEWATER MATH CHEM

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course, students will be introduced to math and chemistry concepts used in water and/or wastewaterplant operations. This is for a credit course that can be taken by water and/or wastewater plant operators planning to take a certification exam or seeking post- certification contact hours. This is a half-semester course with 2-2 hour classes each week for 8 weeks.

Pre-reqs:

PET101 INTRO TO THE PETROL INDUST

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an overview of the oil and natural gas industry. Topics covered include history of petroleum, basic geology, drilling, production, transportation, refining, gas processing, storage, environmental health and safety concerns and the economic and energy impact of petroleum products. Students will be required to complete the International Association of Drilling Contractors Rig Pass safety program with SafeLAND and SafeGULF endorsements.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT252 AUTOMOTIVE DRIVETRAINS II

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed for Toyota dealership technicians and students that desire to become Toyota dealership technicians. The purpose of this course is to familiarize the student in the operation of Toyota automatic transmission systems. The course text is divided into small modular sections making it easy for the student to absorb and apply the information in a logical manner. The instructor will demonstrate Toyota automatic transmission diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to Toyota vehicles. The student will be required to complete 2 hours of out-of-class assignments and answer review questions.

Pre-reqs:

ETD224 ENGINEERING CO-OP

Credit Hours: 4 Contact Hours: 40 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Co-op opportunities are available to students enrolled in Engineering Technologies. Students may contact their faculty advisors or Career Services for more information.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV136 WATER TREATMENT I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of water treatment. The topics of this course include regulatory monitoring, iron and manganese removal, filtration, coagulation, flocculation, and disinfection. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and onlink. This is a 100% web-based course.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KMUS369 Applied Music

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Information Tech

Administrative Srv Off Applion

IRT121 REALTIME THEORY I

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

Introduces to stenotype machine theory and technique with instruction in writing the spoken word and punctuation by means of a realtime translation theory. Emphasis on recording, notereading, and transcribing practice in preparation for more advanced courses in machine reporting. Students will learn realtime theory with instruction focused on the use of electronic media and/or realtime technology and teacher interaction. Upon completion, students should be able to write the theory learned in RT Theory I.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS211 Music Theory to 1750

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT204 ACDELCO CHRYSLR OBD-II EEC DIA

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (CBT) related to Chrysler OBD-2 computer control systems. This course is intended for experienced ACDelco TSS technicians and concentrates on vehicle ECM/PCM diagnostics. The instructor will demonstrate Chrysler OBD-2 related diagnosis, servicing and repair techniques. An in-depth overview of OBD-2 operating parameters, emission systems monitors, and self-diagnostics will accompany hands-on practice. On-vehicle testing will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self-assessment worksheet to reinforce learning objectives

Pre-reqs:

Engineering Tech

Engineering

EET246 TECH PROJ - COMP NETWKG

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A course designed to allow the student to use the capabilities developed in the networking program courses to carry a project from concept to completion.

Pre-reqs:

Business/ Entrepreneurial

Accounting/Finance

BUS124 BUSINESS ANALYSIS WITH ALG

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is designed to present and facilitate the mastery of the use of analysis in business applications. The applications include payroll; buying, markup and markdowns; simple interest including notes and bank discounts; compound interest including business and consumer loans and ordinary annuities. Upon successful completion of this course, the student should be able to apply fundamental analysis to business problems.

Pre-reqs:

Business Studies

Business/ Entrepreneurial

Business Studies

BTD227 SPECIAL TOPICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Special topics in Business Technology Division. Repeat registration permitted.

Pre-reqs:

Engineering Tech

Engineering/Applied

AIT126 IND ELECL APPLIC AND SAFETY

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers an overview of basic commercial/industrial electrical applications. Topics include safe industrial/commercial: electrical principles and applications, wiring techniques and procedures, and basic parallel and series circuits. Safe and effective multimeter usage and industrial instrumentation.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT211 ACDELCO Vibration Control Diag

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (CBT), specifically the terminology and equipment used to diagnose and repair vehicle noise, vibration, and harshness(NVH) problems. Intended for experienced ACDelco TSS technicians, the course focuses on case studies involving NVH diagnostics, with specific emphasis placed on the characteristics of NVH, frequency, cycle, amplitude, order, resonance, and phasing. The instructor will demonstrate the proper use of electronic vibration analyzer (EVA) during NVH diagnosis and repair confirmation. Hands-on practice will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self- assessment worksheet to reinforce learning objectives.

Pre-reqs:

Business Studies

Business/ Entrepreneurial

Business Studies

BTD222 BUSINESS CO-OP

Credit Hours: 2 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Co-op opportunities are available to students enrolled in Business Technologies. Students may contact their faculty advisors or Career Services for more information.

Pre-reqs:

Engineering Tech

Engineering/Applied

MST135 PLUMBNG AND PIPE CODE PRINCPLE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Course concentrates on plumbing rules and regulations governing the installation of simple and complex plumbing systems with an emphasis on the specifications and regulations pertaining to joints, traps, clean-outs, water distribution, fixtures, and drainage.

Pre-reqs:

Business/ Entrepreneurial

Business Mgt/Entrep

FAS121 FUND OF THE FASHION INDUSTRY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This survey course covers the history, characteristics and modern fashion business environment. The course explores how apparel producers and retailers merchandise and market their products within the fashion industry and to the ultimate consumer. Principles of finance, management, organizational behavior and ethical responsibilities of fashion are also examined.

Pre-reqs:

Automotive

Business/ Entrepreneurial

Automotive

AUT144 ELECL/ELECC TERMINAL AND CON

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course allows students to practice and demonstrate previously obtained skills prior to any performance based assessment. This course focuses on skills necessary to work with electrical and electronic systems, sub-systems and components on GM vehicles. The secondary focus of this course is the knowledge and skills required to identify, diagnose and repair electrical terminals and connectors associated with GM vehicles.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV133 WASTEWATER TREATMENT-INDUSTRL

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Using the internet, students will focus on issues of concern to industrial wastewater treatment facilities. The topics of this course include regulatory requirements; flow measurement; preliminary, physical and chemical treatment; filtration; and treatment of metal streams. Along with reading assignments from the text, the course is augmented with audio, photographs, interactive exercises, and onlinks. This is a 100% web-based course.

Pre-reqs:

Information Tech

Computer Security

CFS129 CRYPTOGRAPHY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to information security, potential threats to our information, and effective countermeasures to proactively combat those threats. A comprehensive review of cryptographic techniques is presented and explained in simple mathematical terms. Symmetrical and asymmetrical encryption, digital signatures, Kerberos, creation/deployment of strong keys and passwords, Virtual Private Networks, Tiny Encryption Algorithm (TEA) and other topics will be covered.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ARL141 COMPRESSOR SUB ASSEMBLY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the procedures, practices, and methods for executing all of the sub assembly processes implemented in the assembly of natural gas compressors. Students will identify all of the sub assembly components, execute the assembly process for the components, and prepare a complete sub assembly which could be used as a part of a fully assembled compressor.

Pre-reqs:

PET102 INTRO TO SUP CTRL & DATA ACQ

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will familiarize the student with Supervisory Control and Data Acquisition (SCADA) systems. SCADA is a real-time communication and remote controlling system over a large geographic scale which allows for the collection of data during production, transmission or processing. The course will provide the knowledge to identify the various system components, redundant backup systems and recognize the benefits and limitations of a SCADA system. Students will be asked to sketch a SCADA system for an industry scenario.

Pre-reqs:

AIT128 HIGH PRESSURE STEAMPLANT OPERT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the principles and applications of high pressure (15psi or more) boiler operation. Topics include: Boiler Feed pumps and fuel feeder, feedwater heaters and feedwater treatment, and fuel combustion. Principles and applications of maintenance and safety are also covered in detail. This course also counts toward the overall hours towards taking your high psi boiler operator's license and helps to prepare you to take the test. This course counts for 1,100 hours of the state-required experience hours needed to apply to take the high pressure boiler operator's licensure test.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS127 SELF DEFENSE I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on self-defense. Specific topics include subject control techniques and physical conditioning. CTAG approved Spring 2012 CTBPO.

Pre-reqs:

Health and Human Services

Dental Hygiene

DAS122 DENTAL ASSISTING RADIOGRAPHY

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course focuses on the principles of radiology, x-ray production, radiation safety, practices and hazards. Radiographic techniques, interpretation mounting and evaluation process are presented. Radiographic processing procedures, chemicals, and equipment are emphasized.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV124 TRANSP HAZARD MTL TRNG

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to familiarize the student with Department of Transportation Pipeline and Hazardous Safety Administration (DOT PHMSA) Hazardous Materials Regulations (HMR). The student learns how to properly complete shipping papers, label & mark hazardous material packages and how to placard highway and rail vehicles plus air and vessel containers. The student completes exercises using the Hazardous Materials Table (HMT) and the Emergency Response Guidebook (ERG). Hazardous materials transportation regulations are accessed online. Students successfully passing a written test in accordance with DOT PHMSA regulations will receive a DOT PHMSA Hazardous Materials Initial Training Certificate.

Pre-reqs:

Engineering

Engineering Tech

Engineering

CET121 BLDG MAT AND CON MET

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course familiarizes the student with the basic materials of construction according to their physical properties, durability and suitability for use under varying conditions. Use of materials in combination with one another and in the finished product will be examined both verbally and graphically. Emphasis is placed on material selection according to given criteria. This course is Ohio TAG approved. OET016 effective Summer 2008.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMTH999 Math and Critical Reasoning

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV129 WATER/WASTEWATER-PERMITS&ADMIN

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Students will become more familiar with safety issues and responsibilities associated with the permitting and certification process as it relates to water and wastewater treatment plant operations. They will also have the opportunity to improve their people skills and operations management techniques as they relate to water and wastewater treatment plant operations. This is a 100% web-based course.

Pre-reqs:

Engineering Tech

Engineering/Applied

AIT136 ALTERNATE ENERGY SOURCES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to expand a student's knowledge of different forms and ways to produce energy without conventional combustion fossil fuels. This class gives the student the needed information to explain why and how we generate many forms of alternative energy and why it is important. It discusses the needs and uses of wind turbines, solar, fuel cells, and other alternative energy sources as part of energy solutions in our economy.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT218 ACDELCO ENG PERF FUEL AND AIR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Building upon the technicians knowledge obtained in the related ACDelco Engine Performance web courses, this all-makes instructor led course utilize class discussion and hands on lab experience to further explore and improve the participant's air induction and fuel system diagnostic skills. Course topics include: fuel injector diagnosis and cleaning, vehicle hesitation, diagnosis of air induction system sensor faults and oxygen sensors. Exercises are assigned by the instructor and are comprised of: desk, bench, case study, on-vehicle, and proper tool usage activities.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS232 CIV DISORDRS AND HOMELND SEC

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on civil disorders and homeland security. Specific topics include civil disorder and crowd control, hazardous material/weapons of mass destruction awareness, explosives, and terrorism awareness.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT147 FOUNDATION BRAKES/ABS SYS SERV

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course provides system operation and diagnostic information on various base and antilock brake systems, and their related components. Topics also include master cylinder operation, quick take-up valve operation, brake/drum operation, and hydraulic systems fundamentals.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS171 Piano

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

KART140 3-D Composition

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

MST133 PRESS WORKING FUNDAMENTALS

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers metal deformation theory, presses and ancillary equipment, die construction and die component identification. The student will draw various detailed components of dies, using a variety of drafting techniques.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KSCI9990 Basic Sciences

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Information Tech

Computer Security

HLS225 INTELLIGENCE ANALYSIS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course involves gathering and analyzing foreign and domestic intelligence related to security including terrorism. This course utilizes structured analytical techniques to compile and analyze intelligence gathered from multiple sources to develop thorough and disciplined analytical process. Methods used will include idea generation, scenarios and indicators, hypothesis generation, cause and effect, and decision support. Students will apply structured analytical techniques using intelligence analysis software.

Pre-reqs:

Health and Human Services

Fire and EMS

Health and Human Services

Fire and EMS

FST129 FIREFIGHTER 1

Credit Hours: 6 Contact Hours: 10 Lecture Hours: 4 Lab Hours: 6 Other Hours: 0

This course meets the requirement in the Ohio Revised Code regarding the certification of Firefighter level 1. Instruction includes topic areas taken from NFPA 1001 Fire Fighter 1. This course can be used as the first step in a two-step process in becoming a Firefighter trained to Firefighter level 2. Successful completion of this course is required to take the state certification test at Firefighter level 1. CTAG approved CTFFI002, effective Summer 2013.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KPAS230 Black Experience I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV158 WASTEWATER TRTMT-PLLUTN CONTRL

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of wastewater treatment. The topics of this course include general issues regarding what is meant by the term water pollution, the steps needed to treat it and the math used. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

CUL119 Culinary ServSafe

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This class prepares the student to earn the ServSafe Food Protection Manager Certification sponsored by the National Restaurant Association Educational Foundation. The training will cover the concepts of: food safety and handling, good personal hygiene, time and temperature control, prevention of cross contamination, cleaning and sanitizing, safe food preparation, receiving and storing of food, methods of food handling, HACCP, food safety regulations and food borne illness. Upon completion of the course, the student will be able to take the Food Protection Manager Certification Exam.

Pre-reqs:

Automotive

AUT207 ACDELCO ENGINE PERFORMANCE

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course focuses the diagnostic skills required to properly diagnosis engine control subsystems and performance related conditions. Specific topics include: driveability diagnosis, fuel injection systems, ignition systems, emission controls, PCM functions, and scan tool usage. This course also describes the basic purpose of OBD-II and scan tool related diagnostic procedures and tests using Strategy Based Diagnostics. The instructor will demonstrate engine diagnosis and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV121 REGULATIONS AND COMPLIANCE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will review the history of the American environmental movement and will then look at the fundamental concepts of the environmental law and regulation system. Major environmental laws such as the Clean Water Act, Clean Air Act, SARA, NEPA, SUPERFUND, OSHA and RCRA will be reviewed. The primary focus of the class will be to meet the compliance and liability aspects of the various regulations.

Pre-reqs:

Engineering Tech

Engineering/Applied

MST128 WELDING LAB

Credit Hours: 3 Contact Hours: 6 Lecture Hours: 1 Lab Hours: 5 Other Hours: 0

Safe working procedures are reviewed to teach the student safe working habits while using welding and sheet metal forming, cutting and joining equipment. Instruction on arc, MIG, and TIG welding equipment follows with daily practice when welding in horizontal, vertical and overhead positions. A welding project can be selected later in the course to further the student's knowledge and mastery in welding and shaping actual useable items. Gas welding and cutting is also taught and practiced during this course.

Pre-reqs:

MST127 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

English

ENG231 COLLEGE COMPOSITION II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will build on the skills and knowledge obtained in College Composition including research and inquiry. Students will develop an understanding of rhetoric, argument, and language as they explore and write about complex topics in formal papers. TMEC Approved effective Spring 2010.

Pre-reqs:

ENG124

Engineering Tech

Engineering/Applied

MST127 PRINCIPLES OF WELDING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Instruction in preparation, cutting, and joining similar and dissimilar metals by welding using gas or electrical processes. Oxygen/acetylene and AC/DC electric are the major techniques used, but other processes will be reviewed.

Pre-reqs:

MST128 Can be Taken Concurrently

Engineering

Engineering Tech

Engineering

MET230 ANA/APPS OF FUEL CELLS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses the different types of fuel cells:Polymer Electrolyte Membrane, Solid Oxide, Alkaline, Phosphoric Acid, Molten Carbonate, and Direct Methanol among others. Material properties, operating characteristics, functions and real world applications are discussed and analyzed through different experiments.

Pre-reqs:

MET229

Engineering/Applied

MST228 SHIELDED METAL ARC I

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Continuation of shielded ARC welding as it relates in vertical, overhead 45, and overhead positions, using E-6010 and E-7018 low hydrogen type electrodes.

Pre-reqs:

And MST128

HVC238 CHILLER OPERATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will discuss the specifics of the operation of chillers. The lectures will include small 25 ton unites to large commercial 500 ton chillers. Including installation of the units, service and general maintenance, and troubleshooting and repair. The course will cover how to locate the problems and how to safely manage repairs working with large pieces of equipment.

Pre-reqs:

HVC122

Health and Human Services

Occupational Therapy

Health and Human Services

Occupational Therapy

OTA226 OT ASST SEMINAR

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Examination and discussion of the professional roles and responsibilities of the occupational therapy assistant. Includes exploration of traditional and non-traditional roles, certification, conflict resolution, collaboration of OTR and COTA, ethics and legal aspects of treatment.

Pre-reqs:

And OTA225

OTA225 PHYS DYSFUNTION CLINIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 2 Other Hours: 1

Skill development in selected activities with emphasis on work simplification, fabrication of orthotics and routine evaluation procedures. Supervised work experience in a hospital or clinic setting treating individuals with neurological, orthopedic and other medical conditions.

Pre-reqs:

OTA222

OTA227 CLINICAL APPLICATIONS I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Supervised field work placement designed to provide in-depth experience in and responsibility for delivery of services to patients/clients. Emphasizes the application of academically-acquired knowledge leading to the performance level expected of an entry-level occupational therapy assistant.

Pre-reqs:

And OTA226 Can be Taken Concurrently

Health and Human Services

Occupational Therapy

OTA228 CLINICAL APPLICATIONS II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 3

Supervised field work placement designed to provide in-depth experience and responsibility for delivery of services to patients/clients. Emphasizes the application of academically-acquired knowledge leading to the performance level expected of an entry-level occupational therapy assistant.

Pre-reqs:

OTA224

And OTA225

Engineering Tech

Engineering

EET226 TRANSMISSION AND DISTRIBUTION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course encompasses power transmissions and distribution systems, components and analysis. Field trips to appropriate sites comprise the laboratory requirement.

Pre-reqs:

EET122

EET232 INDUSTRIAL ELECTRONICS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The course consists of digital and analog industrial circuits, such as interfacing to programmable logic controller, DC to DC converters, AC inverters, thyristor phase control, pulse generation and electronic motor speed and motion control with supporting laboratory exercises.

Pre-reqs:

EET123

Engineering Tech

Engineering

EET233 TECH PROJECT ELECTRICAL

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

A course designed to allow the student to demonstrate capabilities acquired during previous course work in the electrical program. The student will choose an approved project compatible with interest and background. The project may be in the area of controls, machine building, electrical design, or power generation and transmission. The scope will be determined by the project, but in general, will include research, testing, drawing, actual construction, a report and presentation.

Pre-reqs:

And EET227

EET235 TECH PROJECT ELECTRONIC

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

Designed to allow the student to exercise the capabilities developed in the Electronic Engineering Technology program. The student will choose an approved project compatible with interest and background. Project may be a design, test or microcomputer-based project. During the project, performance will be verified at given intervals with suitable test procedures.

Pre-reqs:

And EET230

Information Tech

Computer Science

EET260 COMPUTER FORENSICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course presents computer crime investigations. Demonstrations and hands-on practice will reinforce topics such as computer crime, programming in the network monitoring platform, trap and trace techniques and patch level enumeration. Upon completion, the students will be able to provide detailed descriptions of computer crimes and understand the technology related to a response team.

Pre-reqs:

And EET131

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

EUT222 OVERHEAD LINE TECHNOLOGY IV

Credit Hours: 7 Contact Hours: 12 Lecture Hours: 2 Lab Hours: 10 Other Hours: 0

Provides the skills to safely climb transmission support towers and H-structures to achieve the qualified status. Upon qualification, the student will obtain the basic skills to perform intermediate tasks while aloft on these pertinent structures. The student will gain an understanding of substation equipment and one line drawings. Emphasis will be placed on recognizing energized equipment, minimum approach distances and substation safety. At the conclusion of the course, the student will be qualified to enter a substation. Included in this course of instruction are: Lockout/Tagout, Master Drive, Topical Safety, Comprehensive Skills Review and a Safety Fair.

Pre-reqs:

EUT221

Health and Human Services

Health Information

HIT222 HLTHCRE STATSTICS AND RESEARCH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Collection, organization, analysis and presentation of healthcare data; vital and public health statistics; computation and interpretation of healthcare statistics; data retrieval of clinical information from specialized databases; abstracting and maintaining data; importance of data quality and validity; reviewing Institutional Review Board processes.

Pre-reqs:

And HIT224 Can be Taken Concurrently

Engineering Tech

Engineering/Applied

HVC233 HVAC BID SPECIFICATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course of study will make use of actual historic construction industry plans and specifications. The student will be taken through the entire estimation process including work and technical specification reading and comprehension, acquisition of bids and calculation of pricing, preparation of the bid, formatting the bid according to specifications and accepted standards and delivery of a comprehensive bid quotation. Labor rates, available workforce, travel time, completion dates, subcontracts, bonds, accepted alternates, project value and how these items affect the delivered quotation will be introduced during the class exercises.

Pre-reqs:

HVC222

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

IDS102 CRITICAL ANALYSIS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course teaches vocabulary skills, critical comprehension, and analysis of college-level reading material. The course requires a computerized reading software program.

Pre-reqs:

IDS101

Engineering Tech

Engineering/Applied

AIT221 ADVANCED CNC PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover in great detail all the facets of a CNC lathe as compared with a CNC vertical turning center, as well as a CNC vertical milling machine as compared with a horizontal milling machine. The similarities as well as the differences and the advantages of each machine style will be covered. The details will include the accuracy, ease of operation, and the preventive maintenance required. The different specialized fixturing will be stressed.

Pre-reqs:

IET223

Business/ Entrepreneurial

Automotive

AUT188 CAT STEERING SYSTEMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to provide the student with a working knowledge of the theory and repair of CAT lift truck steering systems. Descriptions of drag line and hydrostatic steering systems are included with emphasis on hydrostatic. Before taking this course, the student should have basic knowledge of automotive/lift truck safety practices and experience with common shop tools and techniques. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. The course concludes with a description of routine maintenance procedures, troubleshooting guidelines, and a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121

Sciences

Biology

Sciences

Biology

BIO222 PHARMACOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A course that introduces the student to general pharmacology, including drug nomenclature, classifications, and therapeutic and side effects on the body systems and functions.

Pre-reqs:

Or BIO123

BST222 CELLULAR AND SUBCELLULAR SEPTN

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Students will learn the various strategies and techniques used to purify and characterize biomolecules, with an emphasis on protein. Purification techniques to be employed in the lab include fractionation, centrifugation and low/high-pressure chromatography followed by characterization procedures such as electrophoresis and spectrometry.

Pre-reqs:

BST122

BST225 BIOTECHNOLOGY INSTRUMENTATION

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course will introduce students to the variety of instrumentation used in a biotechnology lab. Students will master the function and use of each instrument as well as proper maintenance, calibration, documentation techniques and protocols.

Pre-reqs:

BST122

Engineering Tech

Engineering

Engineering Tech

Engineering

CET221 SURVEYING GRAPHICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will introduce the student to computerized methods of preparing the various types of maps used by surveyors, civil engineers and contractors. Students will also learn how to prepare plans from electronic data recorders. Coding techniques for field use of data recorders will also be discussed.

Pre-reqs:

And DET125

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

IDS102 CRITICAL ANALYSIS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course teaches vocabulary skills, critical comprehension, and analysis of college-level reading material. The course requires a computerized reading software program.

Pre-reqs:

Or Test & Score: ACT Composite - 22

Engineering Tech

Engineering

DET126 CUSTOMIZING AUTOCAD

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Building on concepts learned in Basic AutoCAD, this course focuses on more advanced topics: isomode; attributes; creation of toolbars, pull-down and button menus; creation of custom line types and hatch patterns; and an introduction to the fundamentals of AutoLISP programming.

Pre-reqs:

DET125

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY223 COMMUNITY ORAL HEALTH II

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

Concepts of assessing, planning, implementing and evaluating oral health programs for community groups is presented. This course focuses on program planning models, incorporation of research methods into programs development and evaluation and offers practical application of community health concepts. Field experience required.

Pre-reqs:

DHY127

Educ/ Liberal Arts/ Math

Social Sciences

SOC221 SOCIAL PROBLEMS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An examination of significant contemporary problems in American society and their impact on traditional and emerging sociological institutions/systems. Special consideration is given to these topics as they apply to social service agencies. TAG approved course--OSS025 effective Spring 2007.

Pre-reqs:

SOC121

Information Tech

Computer Security

IMT262 ADVANCED DIGITAL PHOTOGRAPHY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Continues the study of aesthetic and technical theories and techniques of digital photography. Topics include intermediate level exposure, composition, lighting, creativity and image editing and correction techniques. Projects require exploration and experimentation. Students will begin to develop a personal photographic style. Digital SLR camera required.

Pre-reqs:

IMT132

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DAS123 DENTAL ASSISTING TECH II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Builds on knowledge gained in DAS121. Health and Safety considerations for basic infection control, dental emergencies, common drugs used in dentistry, and oral disease processes are emphasized. Principles and skills of chairside assisting are further developed through demonstration and partner practice. Ethics and jurisprudence is also covered.

Pre-reqs:

DAS121	Can be Taken Concurrently

Medical Assisting

MAT224 PHARMACOLOGY/MEDICATIONS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Course focuses on specific drug classifications, their action and usage with direct relationship to diseases and disorders; mathematical units of measure and dosage calculations; methods for preparing and administering oral, intramuscular, subcutaneous, and intradermal medications used in the physician's office and managing the office drug inventory. Pathophysiology is presented as related to medications.

Pre-reqs:

MAT122

Nursing

NUR224 NURSING SEMINAR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course examines issues related to the role transition from student to entry-level associate degree nurse. Emphasis is placed on student's involvement in exploring issues relevant to practice as a staff nurse.

Pre-reqs:

BIO221

Engineering Tech

Engineering

Engineering Tech

Engineering

MET227 THERMODYNAMICS & HEAT TRANSFER

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Fundamentals of thermodynamics: heat, work and energy. Thermodynamic processes: constant volume, constant pressure, isothermal, adiabatic and polytropic, P-V-T relationships, work and internal energy. Laws of thermodynamics: enthalpy, entropy and reversibility. Gas power cycles and efficiencies: Carnot, Otto, and Diesel. Fundamentals of heat transfer: conduction, convection, radiation and heat exchangers. Emphasis is placed on learning the fundamentals and applying them to solving problems.

Pre-reqs:

PHY121

Sciences

Chemistry

CHM242 ORGANIC CHEMISTRY II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

A continuation of the study of chemical principles and reactivity of organic compounds. Topics include structure, bonding, nomenclature, reactions and reaction mechanisms of aromatic compounds, alcohols, phenols, ethers, epoxides, amines, aldehydes, ketones, carboxylic acids and carboxylic acid derivatives. Additional topics include reactions and synthesis of biomolecules such as carbohydrates, amino acids, proteins, lipids, nucleic acids and synthetic polymers. The use of modern spectroscopic techniques such as IR, NMR, and mass spectroscopy also will be included. TAG OSC010 sequence approved Spring 2012.

Pre-reqs:

CHM241

Educ/ Liberal Arts/ Math

English

ENG241 MAJOR MODERN WRITERS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores the writing of major American and British authors of the twentieth century and after. Students will read, discuss, and write about works by these authors in their historical and cultural contexts. Emphasis will be placed on critical reading of the works; techniques used to analyze them; and their social, historical, and literary significance in relation to the twentieth century and after.

Pre-reqs:

ENG124

Information Tech

Computer Security

Information Tech

Computer Security

IMT259 MUSIC SYNTHESIS II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course requires students to utilize many of the skills they have developed throughout Music Theory and Composition I and II, Technical Musicianship, and Music Synthesis I. It is primarily a project-based course divided into three modules; Analysis of Music Production Styles and Techniques, MIDI Protocol, and Acoustics in a Musical Environment.

Pre-reqs:

IMT239

Engineering Tech

Engineering/Applied

MST138 PREP GAS TUNGSTEN ARC WLDG

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

This lab course will provide the student with a technical understanding of gas tungsten arc welding, arc characteristics and welding safety procedures. In addition, the student will develop skills necessary to weld with pulsed current.

Pre-reqs:

And MST128

Business/ Entrepreneurial

Business Mgt/Entrep

ENT225 GLOBAL ENTREPRENEURSHIP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines how entrepreneurs create and manage emerging ventures in other countries and create and manage start-up emerging ventures which are global in at least one important aspect. The case analyses and classroom discussions sraw on and integrate multidisiplinary concepts, skills,and insights. - marketing, operations, finance, control, decision-making, leadership, ethics, governance, negotiations - all in the service of starting and managing entrepreneurial ventures. Upon successful completion of this course, students should be able to identify and assess business models for international start-ups, venture valuation, sources of financing, deal structuring, cross-cultural issues in entrepreneurship, creating strategic alliances, managing/ leading a small multinational organization, international acquisitions, managing entrepreneurial ventures in situations of financial distress and under changing contexts, and managing global expansions of ventures.

Pre-reqs:

ENT120

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY225 ANESTHESIA AND PAIN CONTROL

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

This course will teach the basic concepts of anesthesia and pain control as they relate to patient management in the provision of comprehensive dental hygiene care. Lecture will focus on theory of pain control, selection of pain control modalities and implications of local anesthesia. Topics will utilize knowledge and review of anatomy, physiology and pharmacology. Lab includes competency based practice of the administration of pain control modalities.

Pre-reqs:

And DHY121

Information Tech

Computer Security

NET134 CCNA PHASE I

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course introduces students to the networking field. Upon completion of this course, students can perform entry-level tasks in the planning, design, installation, operation, and troubleshooting of Ethernet and TCP/IP networks. Technologies include networking mathematics, terminology, models, media, LAN and WAN testing and cabling, Ethernet operation, switching, IP addressing and subnetting, IP, TCP, UDP, and application layer protocols.

Pre-reqs:

Or NET121

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM230 ARGUMENTATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to rhetorical theory particularly as it relates to the theory and practice of argumentation. Students will have the opportunity to practice argumentation in academic debating and persuasive speaking. Students will also study the theoretical foundation of argumentation and its application in various contexts.

Pre-reqs:

And IDS102

Health and Human Services

Health Information

Health and Human Services

Health Information

HIT121 HTLH DATA MGT AND DELIVRY SYSM

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

Organization of health care delivery in the United States including providers and professionals; role of government and external agencies; accreditation and regulatory requirements and issues; structure and function of the American Health Information Management Association; the functions of an HIM department; emphasis on the content and structure of health records and documentation requirements; introduction to electronic health records and use of HIM application software.

Pre-reqs:

HIT123 Can be Taken Concurrently

Medical Lab

MLT222 CLINICAL CHEMISTRY

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3.5 Lab Hours: 3.5 Other Hours: 0

The course is designed to introduce the student to the principles of laboratory instrumentation, clinical chemistry procedures and quality control concepts. The course covers renal and liver function; carbohydrate, lipid and protein metabolism; hormones; electrolytes and mineral balance; blood gases; and clinical enzymes and therapeutic drug monitoring. The class uses lecture, case studies and laboratory procedures.

Pre-reqs:

Or BIO123

Information Tech

Computer Science

WDD223 CONTENT MGT SYS DEV DES

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course teaches students to set up, design, and customize various open-source content management systems. In addition, students will be instructed on the various ways to add shopping cart functionality to those systems. Upon completion, students will be able to make customizations to various open-source content management systems.

Pre-reqs:

Or CPD121

Information Tech

Computer Science

WDD228 SEARCH ENGINE OPTIMIZATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on optimizing HTML code for search engine placement. Topics include link building, natural optimization vs pay per click, understanding web statistics and conducting online PR campaign.

Pre-reqs:

ECA228

WDD125 MICROSOFT EXPRESSION STUDIO

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This class will cover planning your website, setting up a local website in Expression Web, creating your first web page, semantic HTML, beginning CSS using the Expression Web tools and end with a complete website using a Dynamic Web Template.

Pre-reqs:

ECA228

GIS232 REMOTE SENS & DIG IMAGE PROC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course emphasizes remote sensing tools and remotely sensed data including aerial and satellite imagery. Students will be expected to learn how to identify and build data layers from aerial photography, as well as understand the tools and concepts needed to perform orthorectification, mosaicking, data subsets, vegetation mapping, change detection and image enhancement skills.

Pre-reqs:

GIS123

Information Tech

Computer Science

GIS233 ADV TOOLS IN GEOSPAT TECH

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course prepares students to apply processes in geospatial technologies, including spatial analysis, surface analysis and routing analysis. Students are expected to be able to apply appropriate database management and file structure skills in building a geodatabase. By learning the application of GIS data structures and topology, students will be expected to perform geospatial analysis from data collection to data analysis.

Pre-reqs:

GIS231

Health and Human Services

Physical Therapy

PTA224 PTA PROCEDURES II ORTHO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected orthopedic, integumentary, rheumatological and cardiovascular conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

And PTA225 Can be Taken Concurrently

Sciences

Physics

PHY222 GEN PHYSICS II W CALC

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

Study of electricity, magnetism, light, optics, and modern physics. Problem solving in orientation, emphasizing the application and derivation of formulas using calculus for physical situations. Laboratories focus on the correct reading of measuring instruments, proper handling of measurement in calculations, and testing physical theories using measured data. TAG approved Spring 2013 OSC017

Pre-reqs:

PHY221

Health and Human Services

Dietary Management

Health and Human Services

Dietary Management

NTR121 BASIC MEDICAL NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on the essentials of nutrition as required for health. The composition of foods, as well as the functions, sources and interactions of essential nutrients within the role of the human body's metabolic system are discussed. Assessment of nutritional health risks, along with health promotion and disease prevention is discussed. The influence of age, growth and normal development of the life stages are discussed in terms of the nutritional requirements. Methods of meeting dietary needs and sources of reliable nutritional information are addressed along with current nutritional issues and research.

Pre-reqs:

Or Test & Score: ACT Reading - 19

Engineering Tech

Engineering/Applied

HVC234 HVAC ELECTRICAL SYS & APPLIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides the knowledge and skills to understand and safely install, service, and troubleshoot HVAC/R electrical circuits and electronics. Basic electrical foundation fundamentals are provided. HVAC/R electricity and electronic circuits are covered in depth. A focus on proper meter usage is engrained in the process. Motors, controls, and other electrical/electronic devices are covered also. The sequence of operation and diagnostic trouble-shooting, utilizing pictorial, schematic, and hands on approaches are provided.

Pre-reqs:

And HVC121 Can be Taken Concurrently

Information Tech

Computer Security

NET264 UNIX/LINUX SYS ADMIN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers administration and configuration of UNIX and/or LINUX operating systems. Topics include: adding/maintaining user accounts, bootup, shutdown, runlevels, daemons, backup and restoring files, basic network configuration, policies and ethic, process control, file systems, log files. During the lab, the student will install LINUX on a personal harddrive and be the administrator of their personal system. Students will add users, schedule cron jobs, add file systems to their system, etc.

Pre-reqs:

Or ECA277

Information Tech

Computer Security

NET266 UNIX/LINUX NETWORK ADMIN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course addresses administration and configuration of network server software found on the UNIX and/or LINUX operating systems. Students will install a LINUX server of their personal hard drives, setup various types of network servers. Many labs will require students to work together to test each other's server configurations Server topics include: DNS, xinetd, electronic mail, network file sharing, etc. Security topics include: iptables, PAM, tripwire and tiger.

Pre-reqs:

Or ECA277

CFS275 ETHICAL HACKING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course, students learn to discover weaknesses in operating environments using the well known hacking methods. Students will acquire the knowledge to systemically test and exploit internal and external defenses. Students will learn the countermeasures used to mitigate and reduce risk to enterprise networks. Students will be taught how to crack security systems so they can advise organizations on how to protect their systems.

Pre-reqs:

Or ECA277

Engineering Tech

Engineering

CET222 CONCRETE AND ASPHALT TEST

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Major emphasis will be placed on the testing procedures used by engineers in determining material acceptance. Concrete and asphalt design methods will be covered, along with the conducting of many tests and the design of pavement. TAG approved course- OET018 effective Spring 2008.

Pre-reqs:

CET121

Engineering Tech

Engineering

MET226 TECH PROJECT-MECHANICAL

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Students will apply knowledge acquired from technical courses and practical work experience to work independently and complete a technical task. A project is chosen by the student and proposed for approval by the instructor. Topics may be chosen from any area of mechanical, electro-mechanical, design, manufacturing, testing, quality assurance, etc. The scope of the project could include a literature survey, schematics, research analysis, design, fabrication, assembly and testing to create a new or optimize a current design or system. The project will entail students working in teams with elements of both design and mechanical engineering technology.

Pre-reqs:

ETD121

And DET125

Engineering/Applied

EST132 FUNDAMENTAL OF ELECTRICITY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 4 Lab Hours: 1 Other Hours: 0

This course consists of analytical and laboratory techniques with heavy emphasis on resistive and reactive DC & AC electrical circuits, as well as the principles of electronic devices, including diodes and transistors.

Pre-reqs:

MTH101

Health and Human Services

Health Information

HIT232 HLTHCRE REIMBURSEMENT METHODOL

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Healthcare reimbursement methodologies in health care settings; healthcare insurance plans and reimbursement systems; applying methodologies such as DRG's, APC's, RBRVS, etc.; the billing process as it relates to health information management; charge master, revenue cycle management; coding compliance and data quality. TAG approved OHL022 effective Autumn 2010.

Pre-reqs:

HIT124

Information Tech

Administrative Srv Off Applion

Information Tech

Administrative Srv Off Applion

AOT227 ADMIN PROCEDURES AND SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Emphasis will be placed on an administrative office setting. Areas covered include keyboarding and composing of various office correspondences, processing mail, dealing with visitors, maintaining an office calendar, and making travel arrangements. Office problems, practices, and procedures are also emphasized

Pre-reqs:

Or AOT129

Engineering Tech

Engineering

EET120 DC CIRCUIT ANALYSIS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Direct current (DC) circuit analysis. Topics include: voltage, current, resistance, Ohm's law, power, circuit reduction, Kirchhoff's laws, network analysis methods, network theorems, capacitors, inductors, transients and sine wave characteristics. TAG approved course- OET001 effective Summer 2007. CTAG CTEET001 Approved Spring 2012.

Pre-reqs:

MTH125 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

AOT232 AOT PRACTICUM

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 1 Lab Hours: 7 Other Hours: 0

Students work a total of 105 hours for businesses outside of the college or for college faculty and/or staff. Weekly instructor-guided activities are part of this course, which may include required class attendance. Upon completion, students should be able to demonstrate proficiency in administrative tasks and skills in a work environment.

Pre-reqs:

AOT227

Engineering Tech

Engineering

Engineering Tech

Engineering

MET124 STATICS/STR OF MATERIALS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The study of major force systems under conditions of equilibrium. Various methods are used to analyze the effects loads have on structural members and machine components. Topics include force systems, friction, stress and strain, moment and shear diagrams, centroids, moments of intertia, and beam deflection analysis. Emphasis is placed on learning the fundamentals and applying them to solving problems. TAG approved course- OET007 effective Spring 2008.

Pre-reqs:

Or PHY221

Educ/ Liberal Arts/ Math

Education

EDU231 EARLY CHLDHD EDUC ADM PRAC SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

A 210-hour, supervised, ECE administrator work experience. Open only to students enrolled in the Administrator One-Year Certificate for Early Childhood Professionals. This capstone course will allow the student to apply the skills and knowledge learned in business and education coursework. Weekly seminar participation is required.

Pre-reqs:

MGT121 Can be Taken Concurrently

Health and Human Services

Respiratory Therapy/MIST

RCT126 INTRO TO CRITICAL CARE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

An orientation to the principles related to the care of the critically ill patient with an emphasis on mechanical ventilation.

Pre-reqs:

RCT129

Physical Therapy

Health and Human Services

Physical Therapy

PTA228 SEMINAR I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Presentation of topics related to clinical practice to include ethics and professional development.

Pre-reqs:

And PTA229 Can be Taken Concurrently

Information Tech

Computer Science

CSE122B PROGRAMMNG LOGIC &PROB SOLV B

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces the student to program logic and problem solving techniques. Primary emphasis is on achieving familiarity with the coding of iterations, arrays, procedures and programming constructs. Upon completion students should have an understanding of the following constructs: iterations, arrays, procedures and how to use them in program coding.

Pre-reqs:

ECA127A

CSE228 ASSEMBLY LANGUAGE PROG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The relationship between software languages and computer architecture is presented. This course examines assemblers, specification and translation of programming languages, linkers and loaders, block structure languages, parameter passing mechanisms and a comparison of programming languages. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

Or ECA223

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ENV236 ENV HLTH AND SAFTY SPEC PRJECT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to allow the student to exercise the capabilities developed in other courses within the environmental areas. Special current topics important to the environmental or safety field are also incorporated into this class. Students will choose approved projects compatible with their interest and background. An environmental problem will be studied and all regulations that affect the problem are researched, and a plan of action for compliance, abatement and/or remediation will be developed.

Pre-reqs:

And ENV121

And ENV221

Information Tech

Computer Security

IMT264 IMAGE MANAGMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students learn the essentials of professional digital photography for managing, adjusting and publishing small and larger volumes of digital photographs. This hands-on course takes students through a non-destructive professional editing workflow to fine tune photos with precise management tools and methods.

Pre-reqs:

And IMT262

Computer Science

CPD221 ORACLE DATABASE:PL/SQL PR

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

PL/SQL programming & tuning is an intense hands-on course that is designed to give the student maximum exposure to Oracle PL/SQL tuning and optimization. The student learns by doing dozens of in-class exercises and the student will be guided from very simple PL/SQL tuning to advanced PL/SQL performance optimization. The topics start with the basics of SQL and progress into increasingly complex queries, including table joins, subqueries and creating Oracle views. The PL/SQL section begins with simple concepts and the student gradually masters PL/SQL through increasingly challenging classroom exercises.

Pre-reqs:

And ECA127

Or CSE122

Information Tech

Computer Science

SGE223 2D GAME DESIGN AND DEVELP

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on 2D game programming. The student will learn the essentials of 2D game programming, including basic algorithms, collision detection and mathematic algorithms.

Pre-reqs:

ECA222

CSE230 ADV VISUAL BASIC DEV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines advanced features of the VB.NET language and the .NET Framework. The course also examines object-oriented programming topics, including controlled inheritance and the use of cross language inheritance. Comprehensive hands-on lab exercises using Visual Studio.NET reinforce instructor lectures and build direct competence in the topics presented throughout the course. Upon completing this course, the student should be able to create applications utilizing data connections, datasets, and datatables.

Pre-reqs:

ECA128

CSE232 ADVANCED JAVA PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Design, creation, testing, deployment, maintenance and support of software applications using Sun Microsystem's Java language are illustrated through a collection of practical, hands-on lab exercises and lectures. Applications focus on the multi-threaded, networking and multimedia aspects of the Java language. Helps prepare students for specific Sun Microsystem certification test: Sun Certified Programmer for the Java Platform.

Pre-reqs:

Or CSE231

Information Tech

Computer Science

CSE226 SFTWRE ENG FOR HAND-HELD DEVIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides an overview of application development and the lifecycle for mobile devices. In this course, students will create basic applications to run on a mobile operating system. Students will also learn how to use available emulation environments to run and test their applications.

Pre-reqs:

ECA223

CSE235 PYTHON DEVELOPMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will introduce the student to basic programming and syntax, CGI programming, object-oriented techniques, GUIs, exception handling, regular expressions, XML programming, DB-API database integration, networking, security and wireless application development using the Python development environment. Coverage includes control structures, functions, classes, inheritance, string manipulation, security, syntax, objects, exceptions, CGI, GUIs, XML, DB-API, networking, data structures, multimedia, and Python for wireless/handhelds.

Pre-reqs:

Or CSE122

WDD122 WEB GRAPHICS DESIGN B

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course covers in-depth web page layouts and how to create full web page designs using photo software. Students will be able to develop page layouts based on industry best-practices for design and optimization. Upon completion of this course, students will be able to develop web graphics; optimize images for the web and understand the concepts of design as they relate to the web as they use various leading edge technologies to create graphics.

Pre-reqs:

WDD122A

Information Tech

Computer Science

WDD124 FLASH ANIMATION AND DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the students to Adobe Flash. The student will learn to work with Flash effectively and master the concepts of animating with Flash. Topics include developing animations, tutorials and web objects with Flash. Programming in Flash with Actionscript is introduced. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA228

WDD221 WEB DEV W JAVASCRIPT AJAX

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to Javascript and AJAX. Students will be able to develop interactive web sites using JavaScript and AJAX components. Various assignments enhance the student's ability in JavaScript, including interaction with the browser, regular expressions and form validation. Hands-on labs are utilized to reinforce the presented materials.

Pre-reqs:

ECA228

Health and Human Services

Human Services

CDC231 CHEM DEPEND PRACT & SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 14 Other Hours: 0

This course provides the student with the clinical experience in an agency that offers services to persons with substance abuse/dependency disorders and adheres to the practice of the 12-core functions of a chemical dependency counselor. The student participates primarily in assisting with screening, orientation, assessment, counseling, case management, record keeping, crisis intervention, and identifying areas for referral. Students provide a variety of community support services related to substance abuse/dependency. Students are required to attend a weekly seminar to process the clinical experience.

Pre-reqs:

And CDC222

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH124A Statistics, Module A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

And Test & Score: M094 Transfer Prof/Placement - 2

Health and Human Services

Nursing

NUR221 NUR CARE PERSON/ALT I

Credit Hours: 6 Contact Hours: 12 Lecture Hours: 3 Lab Hours: 9 Other Hours: 0

This course introduces the nursing care of persons with alterations in health, with continued emphasis on technical nursing skills. The peri-operative experience is also introduced. The health care needs of the young and middle adult are examined. CTAG CTADNUR002 approved Spring 2012.

Pre-reqs:

And NUR121

NUR222 NUR CARE PERSON/ALT II

Credit Hours: 8 Contact Hours: 15 Lecture Hours: 4 Lab Hours: 11 Other Hours: 0

This course provides for further development and application of concepts in nursing of persons experiencing alterations in health. Principles in oncology nursing are introduced. The course examines the basis of a therapeutic relationship between the nurse and the client. Integrated within the course is the use of the nursing process with clients with common alterations in psychosocial health.

Pre-reqs:

NUR201

Fire and EMS

Health and Human Services

Fire and EMS

FST230 FIREFIGHTER 2

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 4 Lab Hours: 3 Other Hours: 0

This course meets the requirement in the Ohio Revised Code regarding the certification of level 2 Firefighter. Instruction includes topic areas taken from NFPA 1001 Fire Fighter 2. This course can be used as the second step in a two-step process in becoming a Firefighter trained to the Firefighter level 2. Successful completion of this course is required to take the state certification test at Firefighter level 2. A student must have a Firefighter level 1 certification to register for this course.

Pre-reqs:

Or FST128

And FST229

Sciences

Biology

BIO101 INTRO TO ANAT AND PHYSIO

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Provides understanding of human structure and function of all body systems. Focus will be given to beginning chemistry principles, cells and tissues. This course is for the student who has little or no background in human anatomy and physiology. TMNS Approved effective Autumn 2008.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Business/ Entrepreneurial

Business Mgt/Entrep

BUS122 BASIC ECONOMICS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A survey course designed to introduce students to basic economic concepts and principles of modern micro- and macro-economics. Major topic areas will include supply and demand, price system, market economies, monetary and fiscal policy and global economic issues. Upon completion, students should be able to demonstrate an understanding of the above topic areas. TMSBS Approved effective Autumn 2008.

Pre-reqs:

IDS102

Business/ Entrepreneurial

Business Mgt/Entrep

BUS121 BUSINESS ADMINISTRATION

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

A survey course designed to develop a comprehension of business theories and principles. Students will examine the following: American business development, management and organization, human resources, marketing, information for business strategy, decision making, finance and investment. Upon completion, students should be able to demonstrate an understanding of the above topic areas and have a foundation for studying other business subjects.

Pre-reqs:

IDS102

Or Test & Score: ACT Reading - 18

ENT120 ENTREPRENEURSHIP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to the entrepreneurial process from conception to birth of a new venture. Students will examine elements in the entrepreneurial process--personal, sociological, and environmental--that give birth to a new enterprise. Critical factors for starting a new enterprise such as alternative career prospects, family, friends, role models, the state of the economy and the availability of resources will be explored. Students will be introduced to practical tools they can use to further their careers in business, both in entrepreneurship and in more traditional company environments. This course simulates the experiences that entrepreneurs undergo in conceiving, launching, and operating new businesses. The courses enables students to evaluate an entrepreneurial career for themselves. In doing so, it provides want- to-be entrepreneurs with a framework for selecting, funding, and starting their own new ventures.

Pre-reqs:

Or Test & Score: Compass Reading - 080

Educ/ Liberal Arts/ Math

Social Sciences

PSY222 Psy Aspect of Therapy

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Covers the general principles of interaction with a specific focus on those unique challenges confronting the patient and the health care provider. Attention is given to the psychosocial needs of both the patient and the health care provider. Issues of communication, patient-provider relationships, patient dependency, personal values, and relating to people from differing cultures, ages, and special needs are discussed.

Pre-reqs:

Or IDS102

Educ/ Liberal Arts/ Math

Social Sciences

SOC121 SOCIOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduces the general theories of the field, and research methods. Students will examine the impact of culture, social interaction, social structure, socialization, and social institutions on social behavior.

Pre-reqs:

IDS102

PSY121 GENERAL PSYCHOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Surveys the scientific study of behavior, addressing a wide range of traditional topics including introduction and research; perception; consciousness; learning; cognition; personality; pathology/treatment; development; biological basis of behavior; social and organizational psychology. Emphasizes classical and current theory and research with selected attention to practical application.

Pre-reqs:

Or IDS102

Health and Human Services

Health Information

HIT221 CLINICAL CLASSIFICATNS SYS II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

CPT-4/HCPCS coding system and its application in coding procedures; applying coding guidelines with accuracy and completeness using manual and computerized encoding systems; applying coding guidelines of previously learned coding principles; review of the outpatient prospective payment system.

Pre-reqs:

BIO222

Human Services

Health and Human Services

Human Services

SWK231 HUMAN & SOCIAL SERVCE PRAC/SEM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

A 210-hour, supervised experience working in selected Human and Social Services agencies. Open only to Human and Social Service majors. Weekly seminar participation required.

Pre-reqs:

And SWK130

Educ/ Liberal Arts/ Math

Criminal Justice

CJS221 CRIMINOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines theories and patterns of criminal behavior. Topics include types and causes of crime, crime rates, and punishment. TAG approved Spring 2012 OSS034.

Pre-reqs:

CJS121

PLS223 Property and Probate Law

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on property law and probate administration, with an emphasis on the paralegal's roles and responsibilities in the areas of real estate practice and administration of decedent's estates, both testate and intestate. Topics include types of property ownership, conveyances and leases, surveys and title insurance, fiduciary appointment and duties, and determination of probate assets.

Pre-reqs:

PLS122

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

PSY229 PSYCHOLOGICAL METHODS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course serves as the keystone experience for those pursuing the Associate of Arts in Psychology. This course synthesizes previous course work to allow the student an opportunity to demonstrate understanding and competency of broad psychological concepts. Additionally, students are provided the opportunity to apply this understanding through exploring concepts of interest within the field by conducting and producing an empirical study. Systematic guidance is provided throughout the course to assist students in understanding the process.

Pre-reqs:

PSY123

Information Tech

Computer Science

CSE221 ANDROID DEVELOPMENT 1

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers how to build mobile applications for the Google Android platform. The history and architecture of the Android operating system will be analyzed. Upon completion of the course, students will be able to create simple Android applications and also have an understanding of Android SDK Tools.

Pre-reqs:

CSE121

Health and Human Services

Dental Hygiene

DHY134 CLINICAL DENTAL HYG IA

Credit Hours: 1 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Supervised clinical patient care experiences which allow further development of clinical skills and application of concepts. Emphasis on patient management and effective communications.

Pre-reqs:

DHY133

Health and Human Services

Dental Hygiene

DAS227 EXPANDED DENTAL ASSISTING II

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will serve to teach competency in the basic restorative procedures allowed to expanded function dental auxiliary candidates.

Pre-reqs:

Sciences

Biology

BIO123 PRIN OF HUM STRUCT AND FUN

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 4 Lab Hours: 3 Other Hours: 0

A one-semester accelerated anatomy and physiology course which introduces the human body at the chemical, cellular, tissue, organ and system levels of organization. Emphasis is placed on the relationships and maintenance of homeostasis between the systems. The laboratory includes microscopic study of tissues, detailed study of the human cadaver and preserved mammalian organs, conduction of wet labs, and the application of selected physiological processes.

Pre-reqs:

Or BIO121

Educ/ Liberal Arts/ Math

Mathematics

MTH135 PRECALCULUS

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

Study of linear and quadratic equations, their applications; solving rational and radical equations; complex numbers; linear, polynomial and rational inequalities; equations and inequalities involving absolute value; graphs of equations; relations and functions; transformation of functions; combining functions and composite functions; inverse functions; exponential and logarithmic functions and equations; angles and their measure; right angle trigonometry, trigonometric functions of any angle, graphs of trigonometric ratios; inverse trigonometric functions; trigonometric identities and equations, sum, difference, double angle, half angle; applications of trigonometric functions; systems of equations; matrices and determinants; the conic sections; sequences and series.

Pre-reqs:

MTH093

Sciences

Biology

Sciences

Biology

CST121 MODELING AND SIMULATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 1 Other Hours: 0

Analyze a variety of scientific problems by designing a representative model, implement the model, complete a verification and validation process of the model, report on the model in oral and written form, and changing the model to reflect corrections, improvements and enhancements.

Pre-reqs:

MTH221

Health and Human Services

Physical Therapy

PTA221 PTA PROCEDURES I

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 3 Lab Hours: 6 Other Hours: 0

This course will present to the students a comprehensive study of pain and its management; a study of the impairments, disabilities and functional limitations associated with burns, tissue repair, and pulmonary conditions; principles of physical agents/modalities usage including rationale, effects, adverse effects, contraindications, precautions, application, and documentation. Laboratory activities, written assignments, and competencies are required components of this course. Student may perform selected therapeutic interventions with patients under direct PT/PTA supervision as part of the laboratory components of this course.

Pre-reqs:

And PTA122

Business/ Entrepreneurial

Business Mgt/Entrep

CUL221 Bakery & Pastry-Prep III

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to offer baking and pastry preparation information and techniques. Students will focus on an introduction to baking, use of baking equipment and tools, principles of cake baking and decoration, preparation of pastries and desserts as well as career opportunities in baking.

Pre-reqs:

CUL124

Educ/ Liberal Arts/ Math

Education

Educ/ Liberal Arts/ Math

Education

EDU225 THE EXCEPTIONAL CHILD

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

A study of theories and techniques used in assessment and instruction of learning-disabled, developmentally-challenged and gifted children. Developmental traits of children with special needs are examined, and instruction is studied in light of the inclusion and least restrictive environment models. Five observation hours required. TAG approved OED004.

Pre-reqs:

EDU130

Or EDU131

EDU229 EDUCATIONAL PSYCHOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Major theories of human development and learning, motivation instructional strategies, assessment, and similarities and differences in learners are examined. The role of factors in the students' environment that influence students' learning and development are considered. Five observation hours required. TAG OED003 approved Spring 2012.

Pre-reqs:

EDU130

Information Tech

Administrative Srv Off Applion

AOT226 SHRSHEET MICROSFT EXCEL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers spreadsheet applications on the microcomputer using the Microsoft Excel program. Upon completion, students should be able to demonstrate proficiency in using MS Excel in an office setting to solve common business problems.

Pre-reqs:

Or Test & Score: Computer Test - 018

Information Tech

Administrative Srv Off Applion

AOT237 LEGAL OFFICE APPLICATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed for students to gain practical experience in preparing legal documents selected from actual cases, review general information about the tasks assigned, follow established procedures and learn the job responsibilities of a legal assistant through simulated activities. Fundamentals of grammar and punctuation skills, as well as the formatting of legal documents, are emphasized. Upon completion, students should be able to perform legal office responsibilities and produce a variety of legal documents using word processing, spreadsheet, database, and presentation software packages.

Pre-reqs:

Or PLS121

Business/ Entrepreneurial

Business Mgt/Entrep

CUL122 FOOD FUNDAMENTALS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The Food Fundamentals course is an introduction to the development and application of fundamental cooking and techniques. The course introduces the student to entry-level fundamentals such as recipe interpretation, integrated culinary math, culinary terminology, knife skills, large and small equipment identification and use, careers in culinary arts and food service, industry professionalism and entry-level cooking procedures, practices, and techniques.

Pre-reqs:

CUL119 Can be Taken Concurrently

CUL125 MENU PLANNING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers key concepts of menu planning including: design, writing, costing of menu items, marketing and merchandising of a menu. Trends in the industry are explored as well as research, surveys and sales analysis that are key to menu planning.

Pre-reqs:

And CUL120

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH125A COLLEGE ALGEBRA A

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Study of linear, quadratic and absolute value equations and inequalities, graphs of elementary functions and non-functions. TMM001 approved Spring 2012.

Pre-reqs:

MTH093

MTH124A Statistics, Module A

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

Or Test & Score: ACT Math - 22

MTH124 Statistics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to statistical thinking and the use of statistical methods for gathering and analyzing data. The focus is on graphical, tabular, and numerical methods for summarizing distributions. Fundamental concepts of probability are introduced as well as the concepts of discrete (binomial) and continuous (normal) probability distributions and their importance to inferential statistics. Point estimates and interval estimates of population means and standard deviations are obtained stressing the importance of random sampling. Hypothesis testing of one and two sample means and proportions is used for statistical inference along with the F-Test, Chi-Square, and ANOVA. Least squares regression analysis for linear correlation is computed manually or with a statistical package such as SPSS, SAS, Minitab or Excel.

Pre-reqs:

And MTH094

Educ/ Liberal Arts/ Math

Mathematics

MTH125A COLLEGE ALGEBRA A

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Study of linear, quadratic and absolute value equations and inequalities, graphs of elementary functions and non-functions. TMM001 approved Spring 2012.

Pre-reqs:

Or Test & Score: Compass Algebra - 054

MTH125 COLLEGE ALGEBRA

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will study linear, quadratic and absolute value equations and inequalities by applying analytical, graphical, and numerical methods of solution. Elementary functions and non-functions will be examined with reference to extrema, roots (zeros) and end-behavior of their respective graphs. Theory of equations including the Remainder and Factor Theorems, The Rational Root Theorem, and Descartes' Rule of Signs will be used for non-graphical analysis of polynomial functions of degree n. The student will also study exponential and logarithmic functions and the conic sections including their graphs and applications. Systems of equations will be solved by traditional algebraic methods as well as by the application of matrix algebra including determinants. These methods will be extended to include the partial fraction decomposition of rational expressions. TMM001 approved Spring 2012.

Pre-reqs:

Or Test & Score: Compass Algebra - 054

Education

EDU227 EARLY CHLD ED TECH PRACTICUM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 0 Other Hours: 14

A 210-hour, supervised experience working in the early childhood education/caregiving setting. Open only to Early Childhood Education Technology majors. Weekly seminar participation required.

Pre-reqs:

And EDU225 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Education

ASL124 AMERICAN SIGN LANGUAGE II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is the second in a series of three courses. This course acclimates the student to the visual/gestural modality of American Sign Language. Students will utilize a practical approach to teach vocal, grammar, and cultural aspects through the daily practice of expressive and receptive skills. Ten observation hours are required.
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Pre-reqs:

ASL122

English

ENG229 GRANT WRITING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Students will study the general and varied requirements of grant writing in a diversity of public and private areas. Hands-on practice will result in a completed grant or simulated grant of some complexity by the end of the semester.

Pre-reqs:

ENG124

Mathematics

MTH093 Intermediate Algebra I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers mathematical topics that are essential for students in any discipline, but especially for those that will eventually pursue a Bachelor's degree. Topics to be covered are linear graphing; solving inequalities and absolute value equations; an introduction to functions; systems of equations; exponents; and polynomials.

Pre-reqs:

MTH092 Can be Taken Concurrently

Educ/ Liberal Arts/ Math

Mathematics

MTH107 Industrial Math

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will cover the topics of elementary mathematics needed for applications in the vocational and technical curriculum. The operation and use of the scientific calculator as a problem solving tool will be emphasized. Topics include: basic concepts, fractions, the metric system, measurements, polynomials, basic right angle trigonometry, ratios and proportions, geometry, oblique triangles, the law of sines and law of cosines.

Pre-reqs:

And MTH092

Or Test & Score: Compass Algebra - 039

Education and Human Serv

Education

EDU132 Observ, Assess, Group Mgt

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces the student to authentic and formal tools and strategies used in early childhood settings to appropriately assess, plan, and guide young children. Topics include methods of observation, recording growth, development and behavior, interpreting assessment data, influence of culture, and child guidance and group management with an emphasis on fostering self-discipline and pro-social skills. Ten observation hours are required.

Pre-reqs:

Or Test & Score: Compass English - 050

EDU131 Intro to Child Development

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction of the characteristics and needs of young children from prenatal stages through age eight. Typical growth and development, developmental variations, and influences on development are examined by exploring physical, cognitive, social, emotional, and language domains. Historical and contemporary theories and research that support the importance of play, environments for learning, relationships, and the role of the teacher are presented. Fifteen observation hours are required.

Pre-reqs:

Or Test & Score: ACT English - 16

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

TOY104 Toyota Enginge Diagnosis/Rep

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 1 Lab Hours: 8 Other Hours: 0

This course will cover the diagnosis, service, and repair of Toyota internal combustion engines. Upon completion of the class students will be able to state the four strokes of an internal combustion engine and explain the importance of each stroke. Students will develop the knowledge and skills to diagnose mechanical engine faults. They will be able to remove and reinstall an engine from the vehicle; and will gain experience repairing and rebuilding engines. Students will also learn how engine cooling systems and lubrication systems operate and how to diagnosis system faults. Students will be required to validate their understanding of the topics in this class through hands on competency based lab activities. Upon completion of this course students will be prepared to take ASE test A-1 (Engine Repair).

Pre-reqs:

TOY101

Information Tech

Computer Security

NET257 Connecting Networks

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course focuses on interconnecting LAN technologies across the Internet. Course topics include serial connections, T1's and DSL, creating multi-point frame relay and MPLS networks across a provider's network, monitoring, troubleshooting and security.

Pre-reqs:

NET137

Computer Science

CIS124 ITIL FOUNDATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course presents the student with the concepts necessary to be able to identify, plan, and deliver support of Information Technology services to an organization. The content targets the knowledge of the Service Lifecycle and the integration of IT and core business needs. Team activities systematically reinforce the concepts learned. Upon completion, students will be able to identify ITIL, Information Technology Infrastructure Library, and best practices utilized by major corporations.

Pre-reqs:

ITD122

Information Tech

Computer Science

CIS126 FUNDAMENTALS OF INFO SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to familiarize students with core information systems principles and practices. Topics include, but are not limited to, types of information systems, hardware and software, data modeling, database systems, internet technologies, systems development, careers, global and social impacts, and industry trends.

Pre-reqs:

ITD122

Health and Human Services

Physical Therapy

PTA224 PTA PROCEDURES II ORTHO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected orthopedic, integumentary, rheumatological and cardiovascular conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

And PTA228 Can be Taken Concurrently

PTA225 PTA PROCEDURES II NEURO

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

This course presents the impairments, disabilities, functional limitations, data collection and therapeutic interventions of selected cardiovascular, integumentary, neurological, developmental, and traumatic conditions. Also included is study of the anatomy, physiology and pathology of the selected conditions. Laboratory activities, written assignments and competencies are required components of this course. Students will perform selected data collection and interventions as a part of this course.

Pre-reqs:

PTA124

And PTA228 Can be Taken Concurrently

Fire and EMS

Health and Human Services

Fire and EMS

EMS223 PARAMEDIC II CLINICAL

Credit Hours: 2 Contact Hours: 12 Lecture Hours: 0 Lab Hours: 12 Other Hours: 0

This course is a co-requisite to Paramedic II, EMS221. It consists of the clinical and infield internship component related to the course content and skills completed in lab sessions during Paramedic II. CTAG approved course CTEMTP004, effective Summer 2013.

Pre-reqs:

EMS122

Engineering Tech

Engineering/Applied

AET221 SOLAR THERMAL SYSTEMS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course explores the operation, design, installation, maintenance, performance estimting, site selection considerations and troubleshooting of solor thermal systems for consumer and commercial applications. This course explores the following topics: site cost suitability and load analysis, solar heating saftey practices, standards, codes and certifications, systme selections for specific climates and applications, operation and installation methods, proper use of balance-of-system components and materials, solar heating system maintenance, geothermal energy and heat pumps.

Pre-reqs:

AET121

Educ/ Liberal Arts/ Math

English

ENG011 ACADEMIC WRITING

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course provides supplementary instruction for students who are co-enrolled in College Composition (ENG124). This course is designed to enhance student success, providing intensive individualized instruction and practice in major components of drafting, such as process writing, audience awareness, and critical thinking.

Pre-reqs:

Or Test & Score: ACT English - 16

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT135 ADV AUTO DETAILING TECH

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This class provides students with the knowledge, experience, and advanced detailing techniques required to correct and improve imperfections on vehicle painted surfaces, plastic surfaces, and windshields. At the completion of this class, students should be able to use proper polishing techniques and procedures to correct painted surface concerns. Students will also be exposed to techniques and resources used to correct blemishes on vehicle plastic and glass surfaces. Students are expected to follow all current safety standards including the application of all Material Safety Data Sheets (MSDS) chemical suggestions.

Pre-reqs:

AUT132 Can be Taken Concurrently

AUT133 AUTO INTERIOR DETAILING

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This class provides students with the knowledge and introductory experience required to detail the interior of vehicles in the automotive industry. At the completion of this class, students should be able to choose and identify proper tools, cleansers, and other chemicals associated with vehicle interior detailing. Students will learn the appropriate techniques of washing interior components, cleaning, and applying proper chemical conditioners on all major interior components in an automobile. Students will also be expected to follow all current safety standards including the application of all Material Safety Data Sheets (MSDS) chemical suggestions.

Pre-reqs:

AUT132 Can be Taken Concurrently

Information Tech

Computer Science

CPD121 DATA MODELING AND DATABSE DSGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces database concepts and describes how to properly design, create and interface with a relational database. The course begins with definition of important terms. It demonstrates the specific rules that one must follow to design and create a normalized relational database. SQL is also an important topic. Students complete a collection of hands-on labs to learn how to apply the techniques presented.

Pre-reqs:

Or Test & Score: Computer Test - 18

Educ/ Liberal Arts/ Math

Criminal Justice

Educ/ Liberal Arts/ Math

Criminal Justice

CJS140 LAW ENFORCEMENT ACADEMY I

Credit Hours: 8 Contact Hours: 14 Lecture Hours: 5 Lab Hours: 9 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum. The course provides an overview of the American criminal justice system and focuses on Ohio criminal law, criminal procedure for the law enforcement professional, general and investigative report writing, law enforcement driving techniques, and physical conditioning.

Pre-reqs:

Or Test & Score: ACT Reading - 18

Engineering Tech

Engineering/Applied

CDL121 CDL-CLASS A-SAFE OPER & CONTRO

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

This course will provide the student with instruction and requirements needed to take the written CDL permit test (CDIP). Employability skills and basic first aid/CPR will be addressed. Instruction and requirements necessary to take the (H) hazardous materials and (T) double and triple configuration endorsement knowledge tests is included. Instruction consists of classroom and simulator. Students must be at least 18 years of age and able to provide a valid Ohio State Driver's License with minimum two years experience, proof of U. S. Citizenship (birth certificate and Social Security card), meet minimum Department of Transportation (DOT) medical and vision standards and pass a DOT drug screen. Individuals seeking the (H) endorsement are required to undergo a security threat assessment and obtain clearance from the Transportation Security Administration (TSA).

Pre-reqs:

Information Tech

Computer Science

CSE236 ANLYZNG SFTWRE REQ AND DEV SOL

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

Students will work in teams to investigate, analyze, design, and implement a computer software solution to a simulated or actual real-world business problem. Components that are emphasized are preliminary investigations, systems request, fact finding, systems requirements, logical modeling, input and output design principles, and the use of various applications for documentation, design, and development. Upon completion, students will be able to demonstrate an understanding of the software development life cycle.

Pre-reqs:

Or WDD222

Educ/ Liberal Arts/ Math

Mathematics

Educ/ Liberal Arts/ Math

Mathematics

MTH135A PRECALCULUS A

Credit Hours: 2.5 Contact Hours: 2.5 Lecture Hours: 2.5 Lab Hours: 0 Other Hours: 0

Study of linear and quadratic equations, and their applications; solving rational and radical and radical equations; complex numbers; linear, polynomial and rational inequalities; equations and inequalities involving absolute value; graphs of equations; relations and functions; transformation of functions; combining functions and composite functions; inverse functions; exponential and logarithmic functions and equations; the conic sections; sequences and series.

Pre-reqs:

Or Test & Score: ACT Math - 22

Business/ Entrepreneurial

Accounting/Finance

ACC229 COMPUTERIZED ACCTG APPLICATONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course involves the application of the student's accounting knowledge in a computerized setting. The student will record and report accounting information using various commercial accounting packages, including but not limited to QuickBooks Pro and Excel, and practice in problem solving and meeting project deadlines throughout the course. Upon completion, the student should have a functional knowledge of computerized accounting applications and procedures.

Pre-reqs:

Or ITD122

Or ACC132

Education and Human Serv

Education

EDU131 Intro to Child Development

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction of the characteristics and needs of young children from prenatal stages through age eight. Typical growth and development, developmental variations, and influences on development are examined by exploring physical, cognitive, social, emotional, and language domains. Historical and contemporary theories and research that support the importance of play, environments for learning, relationships, and the role of the teacher are presented. Fifteen observation hours are required.

Pre-reqs:

Or ENG101

Health and Human Services

Dietary Management

Health and Human Services

Dietary Management

DTR123 APPLIED NUTRITION

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers the basic application of nutrition assessment to all patients. It also involves the charting of medical records using the current Medical Nutrition Therapy terminology. Along with the process of assessment, the student will learn interviewing techniques and counseling strategies. Nutrition education is introduced using the food exchange lists, nutrition surveys, and the dietary standards.

Pre-reqs:

NTR121

DTR224 CULTURAL NUTRITION

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course provides information on the health, culture, food and nutritional habits of most ethnic and racial groups living in the United States. Coverage of material will include the history, immigration, demographics, worldviews, religion, family structure, traditional beliefs and practices of each cultural group. Traditional and contemporary diets for each cultural group, along with the nutritional status of members of each group will be covered.

Pre-reqs:

DTR221

Educ/ Liberal Arts/ Math

Mathematics

MTH223 ANALYTIC GEOMETRY-CAL I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

In this course students will develop mathematical thinking and communication skills and learn to apply precise logical thinking to the study of analytic geometry, limits, continuity, derivatives, tangent and normal lines, derivatives of trigonometric functions, related rates, Newton's method, Rolle's theorem, mean value theorem, extrema of functions, antiderivatives, definite integrals, indefinite integrals, areas and volumes. Key ideas and concepts will be presented from a variety of perspectives with a broad range of examples and applications. A graphing utility will be used to reinforce and extend concepts and for numerical methods such as the Trapezoidal Rule and Simpson's Rule for integration. Students will progress from a procedural/computational understanding of mathematics to a broader understanding encompassing logical reasoning, generalization, abstraction, and formal proof.

Pre-reqs:

Or Test & Score: Compass Algebra - 084

Health and Human Services

Massage Therapy

Health and Human Services

Massage Therapy

MAS122 MASSAGE THERAPY II

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

This course is a continuation of Massage Therapy I. Students continue to practice procedures necessary to complete a full-body therapeutic massage with an introduction to clinical applications. Students perform massage in a supervised, clinical setting.

Pre-reqs:

And MAS123

Sciences

Biology

BIO121 ANATOMY AND PHYSIOLOGY I

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

The human body is presented as an integrative, homeostatic organism with emphasis on the underlying chemical and cellular processes necessary for proper functioning. The course covers basic histology and examines the following body systems: integumentary, muscular, skeletal, central nervous, and somatic nervous. The laboratory portion of the course includes microscopic study of tissues, detailed study of bone models and human cadaver muscles, and examination of preserved mammalian specimens. Interactive computer simulations of physiological processes are introduced. This is the first course in a two-semester sequence.

Pre-reqs:

BIO101

Health and Human Services

Physical Therapy

PTA226 FUNCTIONAL ANATOMY

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

An in-depth study of the musculoskeletal system with particular attention paid to the movement of joints, motions of the spine and extremities, as well as prime movers involved in these motions. Application of the knowledge of human anatomy with emphasis on biomechanics and functions relative to the neuromusculo-skeletal system. Motion of the human body is studied as a basis for therapeutic exercise and function.

Pre-reqs:

Or BIO122

Occupational Therapy

Health and Human Services

Occupational Therapy

OTA123 PSYCHOSOCIAL ASPECTS OF OT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Introduction to various health-promoting and inhibiting factors as they relate to occupational therapy practice. Provide training related to one-on-one and group treatment for individuals with psychiatric and/or social impairments. Emphasis on utilizing therapeutic use of self, adapted activities, and the environment as the primary means of promoting psychological well-being and enhancing occupational performance.

Pre-reqs:

OTA122

OTA221 DEVELOP ASPECTS IN OT

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Identification and description of handicapping conditions existing from birth or through adulthood. Instruction in occupational therapy theories and treatment for individuals with developmental and learning impairments. Emphasis on therapeutic techniques to enhance occupational performance from birth through adulthood.

Pre-reqs:

Or BIO122

Business/ Entrepreneurial

Automotive

AUT182 CAT OPERATOR SAFETY TRAINING

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course will prepare the student for proper forklift truck operation in the workplace. On March 1, 1999, the Occupational Safety and Health Administration (OSHA) revised its previous requirements for powered industrial truck operator training and issued new requirements to improve the training of persons operating powered industrial trucks (forklift trucks). These provisions mandate a training program that bases training on the types of powered industrial trucks the operator will operate in the workplace; the hazards present in the workplace; and the operator's demonstrated ability to operate a powered industrial truck safely.

Pre-reqs:

AUT121 Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

AUT187 CAT ELECTRICAL SYSTEMS

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

The course is designed to provide the student with an understanding of electrical terms, circuits concepts, and diagnostic techniques on CAT lift trucks. Digital multi-meter usage is stressed, with the students urged to bring their own meter. Instruction is given in wiring repair with time allotted for supervised practice. Also, batteries, starting, charging systems, ignition systems, lighting, and safety systems are covered in depth to insure accurate diagnosis and repair of those systems. The course will emphasize: circuit operation, circuit diagnosis, proper equipment usage for electrical circuit diagnosis, proper soldering techniques, wire and connector repair, Ohm's Law, circuit value conversions, and wiring schematic interpretation. The instructor will demonstrate CAT electrical system diagnosis and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks.

Pre-reqs:

AUT121	Can be Taken Concurrently

AUT189 CAT BRAKING SYSTEMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to provide the student with a working knowledge of the theory and repair of CAT lift truck braking systems. Before taking this course, the student should have a basic knowledge of automotive/lift truck safety practices and experience with common shop tools and techniques. The instructor will demonstrate CAT braking system inspection and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to CAT lift trucks. The course concludes with a description of routine maintenance procedures, troubleshooting guidelines, and a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

AUT121	Can be Taken Concurrently

AUT277 HONDA COMPUTERIZED ENGINE

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers Honda-specific diagnostic and repair techniques necessary to service Honda computerized engine control systems. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper computerized engine control systems inspection and repair procedures. Hands-on practice will enable the students to apply these concepts to Honda vehicles.

Pre-reqs:

AUT223	Can be Taken Concurrently

Business/ Entrepreneurial

Automotive

AUT273 HONDA ADVANCED DIAGNOSTIC APPS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course covers Honda-specific diagnostic and repair techniques necessary to service air bag systems (SRS) and anti-lock braking systems (ABS) on Honda vehicles. Prior to hands-on practice, the instructor will demonstrate equipment usage, Honda service materials, proper system inspection and repair procedures. Hands-on practice will enable the students to apply these concepts to Honda vehicles. Special emphasis is placed on the safety aspects related to air bag systems (SRS) and anti-lock braking systems (ABS).

Pre-reqs:

AUT223 Can be Taken Concurrently

Information Tech

Administrative Srv Off Applion

AOT128 DPT-MICROSOFT PUBLISHER

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts and applications of desktop publishing using Microsoft Publisher. Emphasis is placed on the creation of various types of high-quality documents that combine text and graphics. Upon completion, students should be able to design and produce professional business documents and publications.

Pre-reqs:

Or ECA122

AOT238 WEB DESIGN FOR OFFICE PROF

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts, design, and application for web-page publishing. Students will produce web pages by combining text, graphics, and scanned images. Upon completion, students will be able to design and produce professional web pages using advanced publishing features.

Pre-reqs:

Or ITD220

Health and Human Services

Dietary Management

Health and Human Services

Dietary Management

DMA122 SERVSAFE EXPERIENCE

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course provides off campus experience, in conjunction with (DMA126) Management of Food Service Operations for the Dietary Manager Expierence, precepted by a Registered Dietitian, Registered Dietetic Technician or a Certified Dietary Manager. Students apply the concepts of food safety and sanitation to practical situations within the dietary management field.

Pre-reqs:

Massage Therapy

MAS231 Sports Massage

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course will present a unique focus on the use of basic sports massage, myofascial, neuromuscular and lymphatic facilitation to enhance an athlete's performance potential and treat common athletic injuries and conditions.

Pre-reqs:

MAS121

Engineering Tech

Engineering/Applied

ENV225 SOLID AND HAZ WASTE SMPLG

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the methods and procedures of managing solid and hazardous wastes according to applicable federal regulations such as the Resource Conservation and Recovery Act. Included will be the study of physical facilities and operational standards of sites that treat, store and dispose of solid and hazardous wastes. Case studies will be used to determine the methodologies of waste stream audits, pollution prevention, permitting and land ban determination.

Pre-reqs:

And ENV121

Engineering Tech

Engineering/Applied

ENV226 WATER SAMPLING,ANAL,CONT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover water sampling techniques and chemical analysis of water quality. Included will be methods of measurement, techniques for sampling and required field instrumentation. Laboratory analysis, date interpretation and proper reporting methods will be developed.

Pre-reqs:

Or ENV121

Sciences

Physics

PHY101 PRINCIPLES OF PHYSICS

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

Survey course that assumes no familiarity with physics. Space, time, matter, motion, force, momentum, mechanical energy, heat, electricity, magnetism, light, units of measure and other concepts are studied descriptively. Basic calculation and problem-solving techniques are introduced, including a brief review of elementary algebra. Laboratory work emphasizes how to read measuring instruments, proper use of measured data in calculations, and how measured data can be used to test theories of physics. TMNS Approved effective Autumn 2008.

Pre-reqs:

MTH123

Or Test & Score: ACT Math - 22

Or Test & Score: Compass Reading - 080

Health and Human Services

Dietary Management

DMA127 DIETARY OPERATIONS DELIVERY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Comprehensive systems approach of how to manage foodservice and dietary operations, efficiently and effectively, as they relate to the role and interactions of all departments involved in the total organization of a facility. The foodservice systems model is used as a guide to show managers how to transform all of the systems into outputs of meals, customer satisfactions, employee satisfaction and financial accountability. Additional coverage of sustainability, social responsibility and globalization related to dietary services is incorporated into the course materials.

Pre-reqs:

Business/ Entrepreneurial

Business Mgt/Entrep

Business/ Entrepreneurial

Business Mgt/Entrep

MKT131 CASINO MARKETING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides students with an understanding of casino marketing. This course will identify and discuss marketing theories, practices, and concepts in the casino industry. Students will learn how to achieve a competetive advantage for a casino through the application of marketing.

Pre-reqs:

BUS121

Health and Human Services

Respiratory Therapy/MIST

MIS222 Medical Inst Sterilization III

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course reinforces the technical functions of the field of central service processing/medical instrument sterilization with the review of decontamination, assembly, sterilization, distribution and storage. Other topics include credentialing exam preparation and job readiness skills.

Pre-reqs:

And MIS126

Business/ Entrepreneurial

Business Mgt/Entrep

CUL125 MENU PLANNING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers key concepts of menu planning including: design, writing, costing of menu items, marketing and merchandising of a menu. Trends in the industry are explored as well as research, surveys and sales analysis that are key to menu planning.

Pre-reqs:

Or CUL121

Engineering Tech

Engineering

Engineering Tech

Engineering

EET244 ELECC TELECOMMUNICATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A course dealing with telecommunications hardware and software. Laboratory exercises address both hardware and software applications.

Pre-reqs:

Engineering/Applied

IET223 COMPUTER NUMERICAL CTRL

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

The milling section provides an introduction to part programming for the vertical axis milling machine. The lathe section provides an introduction to programming a computer-numerical controlled lathe.

Pre-reqs:

ARL126 METALLURGY FOR FERROUS MATL

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will cover the processes used in the manufacturing of the various types of ferrous materials and their characteristics. The products covered will range from basic cast iron through the advanced materials such as titanium. The course will also go into the detail of the properties of each of the metals and why they are chosen for a particular product, such as Ariel compressor components, and the newer materials used in automobiles, armor plating, and aerospace parts.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT141 VEHICLE CHASSIS SYSTEMS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed for Toyota dealership technicians and students that desire to become Toyota dealership technicians. This course is designed to provide the student with a working knowledge of the theory and repair of Toyota steering, suspension, and braking systems. Before taking this course, the student should have a basic knowledge of automotive safety practices and experience with common shop tools and techniques. The instructor will demonstrate Toyota steering, suspension, and braking system inspection and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to Toyota vehicles. Special emphasis is placed on the health and safety aspects related to automotive brake service. Students enrolled in this course will complete 4 hours of out-of-class assignments and answer review questions.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KART120 Art Survey

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Health and Human Services

Massage Therapy

MAS230 LTD Branch Massage Therapy Rev

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The course contains a review of Massage Therapy related content in preparation for the Massage and Bodywork Licensing Exam (MBLEx). Unpon successful completion of this course, students will be eligible to take MBLEx and upon successful passage of the exam, students will be able to apply for licensure with the State Medical Board of Ohio (SMBO).

Pre-reqs:

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY121 HEAD/NECK AND ORAL ANATOMY

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

The course addresses gross anatomy of the head and neck, tooth morpholgy and physiology of occlusion.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL139 MECHANICAL FASTENERS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will present a practical guide pertaining to mechanical fastener systems for technicians who work with a wide variety of fasteners found in industry. The course will outline complex and critical design elements focused on safety, reliability and long service life.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KSCI9990 Basic Sciences

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KHUM99 Humanities Core Course

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT130 AUTO SAFETY AND SHOP STANDARDS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed to provide students with the knowledge and introductory experience required to safely perform vehicle service procedures in an automotive shop environment. Proper shop equipment operation, adequate shop ventilation practices, appropriate shop attire, and the use of automotive shop safety equipment are covered using industry standards. The proper use and storage of automotive chemicals are also practiced using current Material Safety Data Sheets (MSDS) chemical safety standards. At the completion of this class, students should be able to properly identify and use shop equipment, categorize and properly store shop chemicals, and work safely in an automotive shop environment.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV131 WASTEWATER TREATMENT I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of wastewater treatment. This introductory course includes instruction in water pollution control, preliminary and primary treatment, fixed film processes and suspended growth systems. Along with reading assignments from the text, the course is enhanced with up-to-date photographs, audio, interactive exercises and online links. This is a 100% web-based course.

Pre-reqs:

Educ/ Liberal Arts/ Math

English

Educ/ Liberal Arts/ Math

English

CHN100 Elementary Chinese I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course will foucs on basic reading, speaking, writing, and listening comprehension skills for Mandarin Chinese.

Pre-reqs:

Health and Human Services

Massage Therapy

MAS121 MASSAGE THERAPY I

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course introduces students to Massage Therapy as a health care profession. Studied are the history and benefits of Massage Therapy and Massage procedures necessary to complete a full-body, therapeutic massage. Laboratory exercises permit students to practice the individual movements that make up a full-body massage.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS231 TRAFFIC ENFORCEMENT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on traffic enforcement. Specific topics include motor vehicle and commercial vehicle offenses, crash investigation and reporting procedures, fact gathering, collection of evidence, speed enforcement, and traffic control. CTAG approved Spring 2012 CTBPO.

Pre-reqs:

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KHUM99 Humanities Core Course

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT206 ACDELCO HONDA EMISSION & DRIVE

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (CBT) related to Honda OBD-2 computer control systems. This course is intended for experienced ACDelco TSS technicians and concentrates on vehicle ECM/PCM diagnostics. The instructor will demonstrate Honda OBD-2 related diagnosis, servicing, and repair techniques. An in-depth overview of OBD-2 operating parameters, emission systems monitors, and self-diagnostics will accompany hands-on practice. On-vehicle testing will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV166 LEAD SAFE RENOVATOR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 0 Lab Hours: 1 Other Hours: 0

Common renovation activities such as sanding, cutting, and demolition may create hazardous lead dust and chips by disturbing lead-based paint, which can be harmful to adults and children. To protect against this risk the EPA issued the Renovation, Repair and Painting Rule. It requires contractors performing renovation, repair, and painting projects that disturb lead-based paint in pre-1978 homes, child care facilities and schools be certified by the United States Environmental Protection Agency and use certified renovators who are trained by EPA-approved training providers. This course will provide students with techniques to ensure lead-safe work practices are followed. Training will include information necessary to contain a work area, minimize dust and how to properly clean up a renovation area to prevent the spread of harmful lead dust. The student will be issued a certificate as a Lead Safe Renovator in accordance with federal and state regulations upon successful completion of the course and a comprehensive final exam.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KENG210 Introduction to Shakespeare

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT137 ASE TEST PREPARATION

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is designed to help the student develop a better understanding of the Automotive Service Excellence (ASE) certification and testing process. Students will access ASE practice tests, instructional videos, technical reference materials, and participate in discussion forums.
Instructor-led discussions will cover Automotive Service Excellence (ASE) certification areas A-1 Engine Repair, A-4 Suspension and Steering, A-5 Brakes, A-6 Electrical/Electronic Systems, and A-7 Heating and Air Conditioning. ASE is the nationally recognized industry standard for automotive technician certification.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KART220 Art History II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Health and Human Services

Dental Hygiene

Health and Human Services

Dental Hygiene

DHY122 ORAL HIST AND EMBRYOLOGY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Embryological development and histologic characteristics of the orofacial organs and structures is presented.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV145 BASIC WATER TREATMENT-QUALITY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of water treatment. The topics of this course include general issues operators face when insuring the quality of the water. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs:

Information Tech

Computer Security

IMT131 COLOR THEORY AND DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the elements and principles of two-dimensional design, including the study of graphic design history, color theory and the elements and principles of design as it applies to the visual arts. Coursework will consist of lectures and discussions involving critiques on color theory and design concepts and applications. Class assignments emphasize creative problem solving techniques with specific limitations and specifications.

Pre-reqs:

Educ/ Liberal Arts/ Math

General Studies

Educ/ Liberal Arts/ Math

General Studies

SSC101 STUDENT SUCCESS SEMINAR

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to aid students in gaining the skills necessary for academic success at Stark State College (SSC). Topics include learning styles, critical thinking, time management, study and test-taking techniques, communication skills, and a variety of personal development strategies. Students will learn how to access and use SSC resources such as mystarkstate, the College's Learning Management System (LMS), Digital Library, Writing Center, Career Development, advising, tutoring, and other College support services. This course also fosters connections between students, their respective academic divisions, and their classmates. Upon completion of this course, students should be able to incorporate into their degrees or certificate programs the tools and skills necessary to be academically and professionally successful.

Pre-reqs:

Criminal Justice

PLS121 INTRO TO PARALEGAL STUDIES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the American legal system and the role of the paralegal within the criminal, civil, and administrative components of that system. Topics include the state and federal court systems, legal research and writing, computer technology in the law, alternative dispute resolution and litigation, legal terminology, ethical considerations and professional responsibility.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV141 BASIC WATER TRMT-DISINFECTN

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of water treatment. The topics of this course include general issues operators face when dealing with a variety of disinfection processes. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This a 100% web-based course.

Pre-reqs:

Health and Human Services

Physical Therapy

Health and Human Services

Physical Therapy

PTA121 FUNDAMENTALS OF PT

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

The student is introduced to the field of physical therapy, basic standards of practice, current professional issues and interactions with patients and other health professionals. The student is instructed in monitoring vital signs, infection control procedures, principles of body mechanics, patient positioning and draping, transfer techniques, range of motion, girth measurements, therapeutic massage and selected conditions and treatments. Laboratory activities, written assignments, and competencies are required components of this course.

Pre-reqs:

Engineering Tech

General Engineering

PET142 Artificial Lift

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an overview of the latest procedures, practices, and equipment used in artificially lifting reservoir fluids. The class will describe hardware and operational issues associated with downhole and surface equipment. Rod pumping, gas lift, plunger lift and other related methods of artificial lift will be covered.

Pre-reqs:

Information Tech

Computer Science

GIS123 MAPS AND MAP READING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will focus on geographic concepts, history of map making, and cartographic terminology and processes. Principle topics covered in this course include map elements, map types, the use of symbology, projections, coordinate systems, scales, distance, contours, topographic features and the understanding of physical, economic and human effects on map making.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT202 AC DELCO BRAKING SYSTEMS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course builds on what was learned in the web courses and will focus on ABS, Traction Control, and Stability systems used in today's vehicles. Theory and operation, component overview, component location, and diagnostic information will also be covered. The instructor will demonstrate proper inspection and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to vehicle stability control systems. The course concludes with a description of routine maintenance procedures, troubleshooting guidelines, and a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV123 OSHA 10-HR GEN IND SAFETY

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This safety orientation course meets the requirements of the Occupational Safety and Health Administration(OSHA) 10-hour training requirement. Students are made aware (general overview) of the most common hazards encountered on the job sites and taught methods (related safety guidelines) to avoid them. Students are introduced to the OSHA standards and requirements as they pertain to general industry. Students that attend the required time and pass a final examination receive a certificate of completion.

Pre-reqs:

Educ/ Liberal Arts/ Math

English

ENG250 TECHNCL COMMUNICATNS INTERSHIP

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Students will work with the student newspaper advisors and staff during a specified period of time with a member of the English Department at Stark State College serving in an advisory capacity. This is a non-paid internship. Successful completion of the internship will require confirmation by the representative of the student organization and the student's advisor that obligations and objectives have been met. Can only be completed in the student's final semester at Stark State College.

Pre-reqs:

Information Tech

Computer Security

Information Tech

Computer Security

IMT136 PRINCIPLES OF ANIMATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course teaches students established animation principles in a traditional 2D environment, bringing more life and appeal to any animation projects. These principles can directly applied to various animation technologies such as 3D, motion graphics, and web animation.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KHIS110 History of Civilization II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

General Engineering

ARL239 LARGE LINE UNIT COMP ASSEMBLY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will cover the procedures, practices, and methods for assembling large unit natural gas compressors. Each component and part of the natural gas compressor will be identified. Procedures for assembling parts and components will be demonstrated and practiced so that the student will be ready to assemble a large unit natural gas compressor upon completion.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT171 INTRODUCTION TO HONDA PACT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course introduces the student to the Honda PACT program and the different methods of instruction that will be used throughout the program. Each students will be issued a user name and password to gain access to the Honda Information System that contains computer- based training modules (CBT) and Honda service information. This course will familiarize the student on how to access and apply Honda service information during repair of Honda vehicles. Prior to hands- on practice, the instructor will demonstrate how to perform a Vehicle Service Inspection and a Honda New-Car Pre-Delivery Inspection.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL129 FUNDAMENTAL OF CNC OPERATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course will cover features of the mill and lathe, manual operations and all aspects of preparing machine tools for operation (including all aspects of mounting and setting up cutting tools), manually entering and test running programs including MDI operation, and the restarting of the programs at random stopping points.

Pre-reqs:

ARL131 CNC MACHING CTR PRG EIA FRMT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This Computer Numerical Control course provides the core knowledge to read, understand, and edit the various programming formats used in standard EIA/ISO, and Macro types of programming used in turning center operations. With assigned lab projects, the student will reinforce the concepts covered.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT205 ACDELCO FORD-OBD-II EEC DIAGN

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This hands-on course builds on what the student has learned and practiced while taking the web courses (CBT) related to Ford OBD-2 computer control systems. This course is intended for experienced ACDelco TSS technicians and concentrates on vehicle ECM/PCM diagnostics. The instructor will demonstrate Ford OBD-2 related diagnosis, servicing and repair techniques. An in-depth overview of OBD-2 operating parameters, emission systems monitors, and self- diagnostics will accompany hands-on practice. On-vehicle testing will enable the students to apply these concepts and procedures to current vehicles. The course concludes with a self-assessment worksheet to reinforce learning objectives.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

PSC121 POLITICAL SCIENCE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An examination of the nature, purpose and forms of American government; the relationship between function and structure; the dynamics of political change; and governmental problems of modern society. TAG approved course- OSS011 effective Spring 2007. Ohio Transfer Module Approved effective Autumn 2008. TMSBS approved Spring 2012.

Pre-reqs:

Business/ Entrepreneurial

Automotive

AUT150 GM MOVEABLE ROOF SYSTEMS

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course focuses on basic hydraulic and electrical theory behind moveable roof operation, as well as, diagnosing and repairing moveable room systems on GM vehicles.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KMUS111 Music Theory

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

IET121 INDUSTRIAL MANAGEMENT CONCEPTS

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This is an introductory course which examines the essential elements of contemporary management in the industrial organization. Topics include, but are not limited to: the changing role of supervisors/managers; the decision-making process; supervisor/manager-employee relationships; team management and problem solving; planning and communication.

Pre-reqs:

Engineering Independent Study

ETD203 ENG INDEPENDENT STUDY

Credit Hours: 3 Contact Hours: 30 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

An independent study may be arranged through the Engineering Technology Division to satisfy student needs that cannot be satisfied through scheduled courses. The student, faculty advisor and dean for Engineering Technology will determine course content, meeting schedules and credit hours.

Pre-reqs:

Business/ Entrepreneurial

Automotive

Business/ Entrepreneurial

Automotive

AUT290 GM ENGINE REPAIR CERT ASSMT

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed to teach the skills necessary to work with engine systems, sub-systems and components on GM vehicles. The secondary focus of this course is for the student to demonstrate their knowledge and skill in identifying, diagnosing and repairing engine systems by completing a performance based assessment associated with GM vehicles. During this portion of the course, the students are tested on the information presented in the course and must demonstrate proficiency of previously obtained skills.

Pre-reqs:

Engineering Tech

Engineering/Applied

MST124 FURNACE COMBUSTION PRINC

Credit Hours: 1 Contact Hours: 1.1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Fuels, the chemistry of combustion, ratio for perfect combustion, mixing of air and fuel, products of combustion, efficiency, heat transfer, heat loss, pressure terminology, burner components, control valves and safety are all topics that are covered.

Pre-reqs:

Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

COM226 ORGANIZATIONAL COMMUNICATION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on communication within organizations, including analysis of organizational theories, interpersonal concepts, group dynamics, cultural influences, and technological variables with the organizational setting.

Pre-reqs:

Engineering Tech

Engineering/Applied

Engineering Tech

Engineering/Applied

ETD229 SPECIAL TOPICS

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

Special topics in Engineering, Industrial, and Emerging Technologies Division.

Pre-reqs:

Educ/ Liberal Arts/ Math

Education

EDU126 EDUCATIONAL TECHNOLOGY

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Encompasses effectively identifying, locating, evaluating, designing, preparing and efficiently using educational technology as instructional resources in the classroom as related to principles of learning and teaching. Students will develop increased classroom communication abilities through lectures, discussions, modeling, laboratory experiences and completion of a comprehensive project. TAG approved OED002 effective Spring 2011.

Pre-reqs:

Engineering Tech

Engineering/Applied

ARL121 CNC LATHE OPERATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This Computer Numerical Control course has been designed to help students read, understand and develop the confidence to edit the various programming formats used in standard EIA/ISO, Conversational and Macro types of programming used in lathe operations. The students will be given the opportunity to apply the information learned from the lecture portion of the course on the lathes available to enter the various Ariel styles of programs into the machine tool control.

Pre-reqs:

Health and Human Services

Health Information

Health and Human Services

Health Information

HIT226 PROFESSIONAL PR I/SEM I

Credit Hours: 3 Contact Hours: 11 Lecture Hours: 1 Lab Hours: 10 Other Hours: 0

Supervised professional practice experience in a healthcare facility which is designed to allow students to apply HIM technical knowledge and skills learned in the classroom. Students complete additional assignments and meet in seminar to discuss the HIM profession and share practicum experiences.

Pre-reqs:

Educ/ Liberal Arts/ Math

Criminal Justice

CJS125 REPORT WRITING

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 0 Lab Hours: 1 Other Hours: 0

This course is part of the Ohio Peace Officer's Basic Training curriculum and focuses on report writing. Specific topics include general and investigative report writing. CTAG approved Spring 2012 CTBPO.

Pre-reqs:

Engineering Tech

Engineering/Applied

PET135 BASIC PIPELINE OPERATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide an overview of pipeline design, maintenance, and operations, including safety and regulatory compliance. Students will receive a basic understanding of pipeline economic importance, quality control and management.

Pre-reqs:

Engineering Tech

Engineering/Applied

ETD225 SPECIAL TOPICS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Special topics in Engineering, Industrial, and Emerging Technologies Division.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

KMUS221 The Understanding of Music

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Health and Human Services

Nursing

NUR121 FUND CONCEPTS IN NURSING

Credit Hours: 6 Contact Hours: 12 Lecture Hours: 3 Lab Hours: 9 Other Hours: 0

This course introduces concepts basic to nursing with an emphasis on the nursing process and assessment skills. Technical nursing skills to maintain, restore, and/or promote basic health care are presented. The health care needs of the older adult are examined. Content also includes an explanation of the historical perspectives of nursing as it impacts on the present associate degree nurse as a member within the profession of nursing and the health care delivery system. Select legal, ethical and social issues affecting nursing are addressed. CTAG CTADNUR002 approved Spring 2012.

Pre-reqs:

Educ/ Liberal Arts/ Math

Social Sciences

Educ/ Liberal Arts/ Math

Social Sciences

KMUS421 History of Jaz

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

Engineering Tech

Engineering/Applied

ENV142 BASIC WATER TRMT-FILTRATION

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Using the internet, students will explore the rudiments of water treatment. The topics of this course include general issues operators face when dealing with the filtration processes. Along with reading assignments from the text, the course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.

Pre-reqs: