# **2024-25**COURSE CATALOG











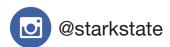
















### Welcome to Stark State College and the University System of Ohio



Department of Higher Education

Mike DeWine, Governor Randy Gardner, Chancellor 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, one-year certificate or career enhancement certificate program, and who is completing the coursework on a part-time or full-time basis after a lapse of years, should seek advising from the appropriate department chair due to possible changes to the requirements.

6200 Frank Ave. NW **I** North Canton, OH 44720-7299 330-494-6170 **I** 800-79-STARK

For most current class schedule: starkstate.edu

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 (ancestry), military status (past, present or future), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a nursing mother, status as a foster parent, disability, age (40 years or older), genetic information, sexual orientation, gender identity or gender expression.

For inquiries regarding the College's non-discrimination policies, please contact:

Title IX - Cheif of Security, Gregory Boudreaux: 330-494-6170 ext. 4512

Section 504 & Title VI - Dean of Learning & Engagement, Danette Bosh Alexander: 330-494-6170 ext. 4501



#### Administrative Officers

#### Para M. Jones, Ph.D.

President, Stark State College

#### Lada Gibson-Shreve, Ph.D.

Provost and Chief Academic Officer

#### Kevin D. Gardner

CFO/Vice President of Business

#### Stephanie M. Sutton, Ed.D.

Vice President of Enrollment Management

#### Patrick Roberts, Ph.D.

Vice President of Marketing, Advancement and Partnerships

#### **Melissa Glanz**

Vice President of Human Resources

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#### VISION STATEMENT

Stark State College aspires to be Ohio's leading community college in fostering student success and community prosperity through innovation, responsiveness, and partnerships.

#### MISSION STATEMENT

Stark State College positively influences the life of each student and our communities by providing access to high-quality, relevant, and affordable education.

## GENERAL EDUCATION 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, evaluate, locate, synthesize and gather information as well as think critically and logically. It teaches students to explore diversity and its interrelationships as well as community engagement and informed citizenship. Students are taught ethical responsibility, social responsibility, teamwork 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 serving and educating students, to academic excellence, and to continuous improvement of the education we offer. We work collaboratively to create a campus culture that is academically challenging with holistic support.

### GENERAL LEARNING OUTCOMES

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

- Organize and develop ideas effectively with a clear message.
- Present ideas in an appropriate, mechanically and grammatically correct, professional style.
- Follow a standardized documentation format using credible evidence.

### QUANTITATIVE LITERACY (INCLUDES COMPUTATIONAL SKILLS)

- Explain and convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words).
- Draw appropriate conclusions based on quantitative or qualitative analysis
  of data and evaluations of assumptions and parameters in problem-solving,
  estimation, modeling and statistical analysis using appropriate strategies,
  tools and technology.
- Organize and synthesize quantitative or qualitative evidence in support of the argument or purpose of the work using appropriate formatting and context.

#### INFORMATION LITERACY SKILLS

- Effectively define the scope, and determine key concepts of, the needed information to achieve specific purpose.
- Locate, evaluate, synthesize and communicate effectively the information obtained using appropriate strategies.
- Recognize ethical and legal restrictions on the use of information including copyright rules and the ethics of extracting, sharing and citing source information.

#### **CRITICAL THINKING SKILLS**

- Analyze and synthesize information or data to make decisions and problem-solve.
- Reflect and analyze one's own and others' 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 an awareness of factors that impact diversity, equity and inclusion: culture, history, sexual identity, psychological functioning, education, economics, environment, geography, language, politics, age, gender, ethnic background, physical challenges, social class, social skills and religion.
- Articulate and identify differences between individuals and groups to work effectively cross-culturally through collaboration and communication.
- Evaluate and apply diverse perspectives to complex subjects within natural
  and human systems in the face of multiple and even conflicting positions while
  understanding one's identity in the global context.

#### 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.
- Communicate respectfully and professionally, and promote community services and engagement with diverse populations in a manner that is expected of ethical professionals and the community as a whole.
- Engage as a contributing member of a team in a productive, cohesive 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 workforce development.

Stark State, with a service district of Stark and Summit counties, is the fourth largest of the 23 public two-year colleges in the University System of Ohio. We offer more than 200 associate degrees and certificates in business, education, engineering technologies, health and public services, information technology, 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. Our wide range of short-term certificates helps 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.

#### PARTNERS IN ECONOMIC GROWTH AND DEVELOPMENT

Well-respected in the community, Stark State College plays a crucial 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 also vital to the area, including our alignments with The Timken Company and Metallus (formerly TimkenSteel); FirstEnergy Corporation; General Motors, Toyota, Caterpillar and Honda; and many others. These collaborations fuel economic development, creating new industries and jobs in the area.

#### **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.
- Our LEED-certified Business and Entrepreneurial Studies building 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.
- 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 majors. 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 new site in downtown Canton for second-year automotive technology students has allowed the program to expand to meet community demand.
- Stark State College Akron, at 360 Perkins Street, is a new 68,414-square-foot building that includes 14 lecture classrooms, six computer labs and a science lab, along with a bookstore, common area, tutoring center, student services area and faculty offices. The third floor boasts specially designed classrooms and labs for the College's medical programs, including a unique cadaver lab, while the lower level has electrical, CAD and computer networking labs along with computer labs, an additional testing center and classrooms.

### EXPERIENCED, CREDENTIALED FACULTY SERVE OUR DIVERSE STUDENTS

The average degree-seeking student fits the profile of the typical two-year college student in the nation: 58% of Stark State students are female, 65% attend college part time, 22% are minorities and 47% are the first generation in their families to attend college. The average age of Stark State's students is 26 and 70% of our students hold jobs while in school.

The College has 158 full-time faculty and more than 380 adjunct faculty. More than 60% of the College's full-time faculty members have master's degrees and nearly 20% 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 and is a member of the North Central Association of Colleges and Schools. Many technology programs also are accredited by their respective licensing/accrediting organizations (www.ncahlc.org). Stark State is located in northern Stark County near Interstate 77, conveniently located for students from Stark, Carroll, Columbiana, Holmes, Mahoning, Medina, Portage, Summit, Tuscarawas and Wayne counties. Stark State College Akron is located off of State Route 8 in Akron. Another satellite center is located in downtown Canton.

\*Revised data 1/2024, exluding College Credit Plus and Early College students

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 Provost's Office.

# ACCREDITATIONS AND PROGRAM APPROVALS

#### STARK STATE COLLEGE IS ACCREDITED BY

The Higher Learning Commission, 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; hlcommission.org

Ohio Department of Higher Education, 25 South Front Street, Columbus, OH 43215; 614-466-6000; Fax: 614-466-5866; hotline@highered.ohio.gov

#### **BUSINESS**

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

CULINARY ARTS Stark State's culinary arts program is accredited by the Accrediting Commission of the American Culinary Federation Education Foundation, 180 Center Place Way, St. Augustine, FL 32095; 904-824-4468; acfchefs.org

#### **ENGINEERING TECHNOLOGIES**

AUTOMOTIVE AND TRANSPORTATION (Comprehensive, GM-ASEP, Honda PACT, Toyota T-TEN) Accredited by the ASE Education Foundation; 1503 Edwards Ferry Rd. NE, Suite 401, Leesburg, VA 20176; aseeducationfoundation.org

CIVIL ENGINEERING TECHNOLOGY, ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY and MECHANICAL ENGINEERING TECHNOLOGY Accredited by the Engineering Technology Accreditation Commission of ABET; 415 North Charles Street, Baltimore, MD 21201; 410-347-7700; abet.org

#### **HEALTH AND PUBLIC SERVICES**

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; ada.org/en/coda

**DIETETIC TECHNICIAN PROGRAM** The dietetic technician program is accredited by the Accreditation Council for Education in Nutrition & Dietetics (ACEND), 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995; 800-877-1600 ext. 5400; eatrightpro.org/acend

FIRE/EMERGENCY MEDICAL Accreditation #008; Department of Public Safety/ Division of EMS,1970 West Broad Street, Columbus, OH 43223; 800-233-0785; ems.ohio.gov

The Paramedic Program of Stark State College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs 25400 US Highway 19 N., Suite 158, Clearwater, FL 33763 727-210-2350; caahep.org

To contact CoAEMSP: 8301 Lakeview Parkway, Suite 111-312, Rowlette, TX 75088 214-703-8445; Fax: 214-703-8992; coaemsp.org

HEALTH INFORMATION MANAGEMENT The Health Information Management accreditor of Stark State College is the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). The College's accreditation for Associate degree Health Information Management has been reaffirmed through 2029. All inquiries about the program's accreditation status should be directed by mail to CAHIIM, 200 East Randolph Street, Suite 5100, Chicago, IL 60601; by phone at 312-235-3255; or by email at info@cahiim.org.

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; 9355 – 113th St. N, #7709, Seminole, FL 33775; 727-210-2350; caahep.org

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; 773-714-8880; naacls.org

**NURSING** The associate nursing program at Stark State College at the main campus located in North Canton, Ohio, is accredited by the: Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326 404-975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the associate nursing program is Continuing Accreditation. acenursing.org, nursing.ohio.gov

OCCUPATIONAL THERAPY ASSISANT PROGRAM Accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA): ACOTE, 7501 Wisconsin Avenue, Suite 510E, Bethesda, MD 20814. phone number 1-800-729-2682; www.acoteonline.org

PHYSICAL THERAPIST ASSISANT 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, 3030 Potomac Ave., Suite 100, Alexandria, Virginia, 22305-3085; 703-684-2782; capteonline.org/home.aspx; apta.org

RESPIRATORY CARE The respiratory care program is accredited by the Commission on Accreditation for Respiratory Care (CoARC): 264 Precision Blvd. Telford, TN 37690; 817-283-2835; coarc.com

SURGICAL ASSISTING TECHNOLOGY The Surgical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (caahep.org) upon the recommendation of Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA). Commission on Accreditation of Allied Health Education Programs, 9355 113th St. N, Seminole, FL 33775-7709, (ARC/STSA).

SURGICAL TECHNOLOGY The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (caahep.org) upon the recommendation of Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA). Commission on Accreditation of Allied Health Education Programs, 9355 113th St. N, Seminole, FL 33775-7709 (ARC/STSA).

#### INFORMATION TECHNOLOGIES

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; acbsp.org

JUDICIAL REPORTING (Day), BROADCAST CAPTIONING AND ONLINE PROGRAMS Accredited by Council on Approved Student Education National Court Reporters Association (NCRA): NCRA, 12030 Sunrise Valley Drive, Suite 400, Reston, Virginia 20191; 800-272-6272; ncraonline.org

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

#### **STARK STATE APPROVALS**

CRIMINAL JUSTICE (LAW ENFORCEMENT ACADEMY - BASIC TRAINING COURSE) Approved by the Ohio Peace Officer Training Academy (OPOTC); 30 E. Broad St., 14th Floor, Columbus, OH 43215; 800-282-0515; OhioAttorneyGeneral.gov

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

EARLY CHILDHOOD EDUCATION Approved by the Ohio Department of Education: Certification and Licensure, Ohio Department of Education, 25 South Front Street, Columbus, OH 43215; 877-644-6338, 614-466-3593; ode.state.oh.us

eSTARKSTATE Online degrees offered by Stark State College have been approved by The Higher Learning Commission, 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; hlcommission.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; med.ohio.gov

STATE TESTED NURSE AIDE (STNA) TRAINING PROGRAM Approved by the Ohio Department of Health (ODH); 614-466-3543; odh.ohio.gov

### Admissions Procedures

Complete the following admissions steps, and if you need help along the way, give us a call at 330-494-6170 and ask for the Admissions Office.

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

#### **APPLY FOR ADMISSION**

Complete your application online at starkstate.edu.

#### **SUBMIT YOUR DOCUMENTS**

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

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

#### **PLACEMENT ASSESSMENT**

Provide your ACT scores (if you've taken the test within the last five years) \_\_OR\_

Set up an appointment to take the ACCUPLACER assessment. Call 330-494-6170 or stop in M110.

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Have the results of any ACCUPLACER assessment you've taken in the past five years at another college or university sent to the Admissions Office.

#### **APPLY FOR FINANCIAL AID**

You'll need to complete the FAFSA (Free Application for Federal Student Aid) to apply for financial aid. Go to <u>fafsa.gov</u> and use Stark State College's school code, 011141.

Visit Gateway student services in M102 or the financial aid webpage at <u>starkstate.edu/finaid</u> for more detailed information.

#### **NEW STUDENT ORIENTATION**

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 <a href="starkstate.edu/orientation">starkstate.edu/orientation</a>. You'll need your student identification number to reserve your seat.

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

#### TRANSFER APPLICANTS

Transfer credit will be accepted for successfully completed college-level courses from institutions of higher education that are accredited by the Higher Learning Commission or other regional accrediting commissions recognized by the Council On Higher Education Accreditation (CHEA). Transfer credit 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:

- Complete a Stark State College application. The application is available online at starkstate.edu/admissions.
- 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.
- Meet with a Stark State enrollment representative to review enrollment process. Contact the Admissions Office at 330-494-6170 with questions.

#### INTERNATIONAL STUDENT ADMISSIONS

Stark State College is a certified Student and Exchange Visitor Program (SEVP) designee that welcomes qualified F1 visa holders from other countries. According to the Code of Federal Regulations 8 CFR 214.3(a) (2), specific schools are eligible to enroll F visa holder students, including a community college or junior college that provides instruction in liberal arts or in the professions and awards recognized associate degrees.

The following procedures pertain to international students holding an F visa who apply for admission to Stark State College.

- 1. Application.
  - a. An application must be completed and submitted to Stark State College using the international application available at starkstate.edu/ admissions.
- 2. High school diploma (or equivalent) and transcripts
  - a. It is the responsibility of the student to submit original or certified copies of the academic record in the original language with English translations. Students who have high school transcripts in a foreign language need to have them evaluated through a National Association of Credential Evaluation Services (NACES) naces.org/members.htm. The records must show completion of an equivalent level of a four-year high school diploma in the U.S. Students may also submit original or certified copies of examination results issued by the high school or examination board. Photocopies may be submitted in addition to the originals if requesting to have the original returned.
- 3. College transcripts
  - a. Official U.S. college or university transcript.
  - b. Foreign college records. To request transfer credits for courses completed, submit your original or certified copies in the original language, and English translations of the records are required. Students must submit foreign transcripts to a professional foreign transcript evaluation service in the U.S. to pursue the possibility of receiving transfer credit(s).
- 4. Proof of English language proficiency. English proficiency results mustnot be more than two years old. Testing may be waived if the student has earned a degree from an accredited U.S. college or university or has completed a college-level English composition course with a grade of "C" or above from an accredited U.S college or university.

- TOEFL (Test of English as a Foreign Language): Stark State College institutional code is 1688. Paper-Based Test (PBT: minimum score of 500) or Internet-Based Test (iBT: minimum total score of 61 AND no score below 18 on both reading and writing sections)
- IELTS (International English Language Testing System): Minimum score of 6.0
- c. ACT (American College Test): Minimum English score of 18 or higher
- d. AP (Advanced Placement Exam): English Literature and Composition or English Language and Composition test score of 3 or higher
- e. Transfer credit in college-level English with a grade of "C" or better from an accredited U.S. college or university
- Immigration documents. Photocopies of the following documents must be submitted:
  - a. Passport page that includes the student's photo and visa page.
  - b. Front and back of the I-94 3.
  - c. If an F visa holder is transferring to Stark State College, the Form I-20 from the student's current U.S. college or university, along with any transfer forms, must be submitted to the Admissions Office.
  - d. Financial documents for F visa applicants and dependents. An original letter on official letterhead from a bank or other financial institution in which the sponsor has saving deposits or other types of accounts containing readily available funds. Student must provide:
    - Date account(s) were opened.
    - Specific amount of funds in the account. Names listed as account holders on bank statement must match names and signatures on Affidavit of Financial Support form. The statement must be in English, and signed and sealed by the appropriate bank or government official. This information must be dated within six months of the intended date of enrollment. No business accounts will be accepted.
- After the above process is complete and the student is admitted to Stark State College, a Form I-20 Certificate of Eligibility for Nonimmigrant Student Status is mailed to the student.

#### mySSC PORTAL AND BANNER SELF SERVICE

The mySSC 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 mySSC 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 eStarkState and email.

Note: NEW students must enroll in person for classes.

#### **CAREER COMMUNITIES**

Stark State's 10 career communities help you look at clusters of occupations that align with your interests, skills, goals and career plans. Whether you have your sights set on a specific career pathway or are exploring your options, it's a simpler way to find your career calling among the more than 200-plus degrees and certificates Stark State offers. You can select a certificate or associate degree in a career community or explore your passion by choosing an exploratory major within a career community.

If you aren't sure exactly what you want to study or what degree you want to pursue, selecting an exploratory major will help with structured exploration

while reducing taking unnecessary credits. Your Gateway advisor and career services specialist are here to help you get to a career decision and completion of your program of study so you can begin your dream career and job!

#### **ACADEMIC ADVISING**

As you begin your Stark State educational journey, you'll be supported by a Gateway advisor who will help you establish your career goal and select the right courses for you to accomplish it. Your Gateway advisor will stay with you through your initial 15 college credit hours, and then help you transition to your faculty advisor. Your faculty advisor will help ensure you're taking the right courses to complete your program of study and also will be your success champion as you progress to completion of your degree or certificate. Your advisors will work together to be your go-to team and help you navigate Stark State College to realize your goals.

You can find the name of your Gateway advisor and faculty advisor in your student portal, mySSC. Once in mySSC, click the MyStuff tab, scroll to the Academic Profile option and select the current term from the drop-down menu. Your information will include the names of your Gateway advisor and faculty advisor.

#### PLACEMENT TESTING

Every first-time Stark State degree-seeking student is required to take the ACCUPLACER exam unless the student has ACT scores. Students may retake the ACCUPLACER test once per academic year; however, once a student has begun a course based on ACCUPLACER placement, they may not retest in that area. Students with applicable transfer credits are not required to test in that area.

#### REQUIRED COURSE PLACEMENT

First-time Stark State degree-seeking students are required to complete all developmental courses into which they are placed by ACCUPLACER 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 must:

- 1. Provide documentation to support the learning.
- 2. Have documentation evaluated by the appropriate college personnel.

If awarded, approved credit will be recorded on transcripts after a student successfully completes one semester at Stark State College. For more information, contact the Admissions Office to speak with the prior learning assessment coordinator.

#### **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 the sixth business day of the semester (16, 10, 8 and 5 week).

#### 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 Admissions Office 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 Admissions Office at 330-494-6170 for additional information.

#### ACADEMIC OUTREACH AND SATELLITE CENTERS

At Stark State College, we understand the importance of making college education accessible to you in your community. The College is committed to serving students of all ages where they live and work by providing access to transferable higher education at our satellite centers and other locations. The College has locations in Akron and downtown Canton. Each location offers students the same convenience, affordability, quality faculty and individualized attention as our main campus. Satellites and off-site locations also offer personalized service in the admissions process, and the convenient location and parking can save you money on gas.

Financial aid and scholarship opportunities are available. Call 330-494-6170 or visit <u>starkstate.edu/satellites</u> to find out how we can help you meet your education and career goals.

#### **COLLEGE CREDIT PLUS**

High school students from partner high schools may enroll in College Credit Plus courses. These courses may be offered at their 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 (ACCUPLACER, ACT or SAT) and fulfill all prerequisites in order to enroll. Courses 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 starkstate.edu/collegecreditplus.

#### **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 Department of Higher Education and the Ohio Department of Education, has divided the state into six regional centers. Stark State College partners with Kent State University, The University of Akron and Youngstown State University in the 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 coursework 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 are provided in the Admissions Office. This card also serves as the student library card. You are expected to carry your ID card at all times. Lost or stolen ID cards should be reported to Gateway student services. A new card can be issued once the fee is paid.

#### STUDENT RESPONSIBILITY

Students are responsible for being familiar with and adhering to all college policies and procedures as published on the College website at 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 starkstate.edu/policies. Requests for printed copies of policies and procedures, or questions regarding any policy or procedure, should be directed to the Provost's Office.

# CAREER SERVICES AND WORKFORCE DEVELOPMENT

The Career Services and Workforce Development Office enhances your success with comprehensive and innovative exploration of personal, academic and professional interests to help you secure a meaningful career. We connect with businesses and industries to maximize your career opportunities and make sure you're highly competitive in the job market. Our office also offers non-credit training and certificates to help you increase your skills and advance in your career. Visit us in the main campus Gateway Admissions Center - room M104, Akron campus Gateway Student Services - room A113L and on our website starkstate.edu/careerservices/.

Services offered – Career exploration, resume, cover letter, elevator pitch, career fair preparation, mock interview, interview coaching, internship and apprenticeship search, job search, Linkedln and Handshake development, and networking.

Career exploration – Know that you want to enhance your education but aren't sure which career path would be the best choice for you? We offer individualized career exploration appointments to help you find your purpose and fit, helping you to feel confident in your major/career choice.

Job search assistance — We provide the latest research-driven information on job searches, what employers are looking for, and how to choose an in-demand career. We can help you with all aspects of the job search, including resumes, cover letters, interviewing skills and more.

Online job, internship and event board (Handshake) — You can search for full-time, part-time, seasonal and/or internship opportunities; register for career-related workshops, events and career fairs; research companies; connect with other users and more. Develop your profile so that employers can see your education, skills and experience 24-hours a day: joinhandshake.com

Professional work experience — We help you connect with employers for full-/part-time jobs, internships, co-ops or apprenticeships.

Alumni assistance – We offer lifelong assistance to all who attended Stark State.

Workforce training — Gain new skills to advance in your career or help you get a job you want. Visit starkstate.edu/workforce to browse in-person and online training.

Schedule an appointment – Stop in M104, call 330-966-5459, or go online:

- main campus in-person appointment: gatewayadvising.as.me/CareerMain
- SSC Akron in-person appointment: gatewayadvising.as.me/CareerAkron
- Remote/virtual appointment: gatewayadvising.as.me/CareerRemote

### FINANCIAL AID

Gateway student services 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 Gateway student services staff is to provide financial assistance to students who otherwise could not afford to attend college. Additional information about financial aid is available at starkstate.edu/finaid or in Gateway student services, located in M102.

#### 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 starkstate.edu/admissions.
- Apply for financial aid All students applying for financial aid must complete the Free Application for Federal Student Aid (FAFSA). Apply via fafsa.gov. The Stark State College school code is 011141.
- Accept/decline any aid offered in your mySSC account.

#### REQUIRED FORMS AND PRIORITY DATES

#### **Summer Session**

April 1 FAFSA filing deadline

April 15 Required documentation deadline

May 15 Loan request deadline

#### **Fall Session**

July 1 FAFSA filing deadline

Aug 1 Required documentation deadline

Aug 15 Loan request deadline

#### **Spring Session**

Nov1 FAFSA filing deadline

Nov 15 Required documentation deadline

Dec 15 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 \$740 to \$7,395 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 \$600 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)

This 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 Gateway student services. 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 School Certifying Official, located in M102, certifies veterans' eligibility.

#### **Scholarships**

Stark State College offers a wide variety of scholarship opportunities for qualified students. Additional information is available at <a href="mailto:starkstate.edu/scholarships">starkstate.edu/scholarships</a>.

#### **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.

#### **Direct Subsidized Loans**

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

#### **Direct Unsubsidized Loans**

Students who do not qualify for a Direct Subsidized Loan may be eligible to borrow up to the maximum annual amounts in unsubsidized loan funds. Loan payments can be deferred as long as the student is enrolled at least half time. Interest begins accruing when the loan is disbursed and can be paid by the borrower while in school and during the grace period to avoid capitalization. Independent students may have the option of borrowing an additional \$4,000 in unsubsidized Direct Loan funds.

#### 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 10.5%). Repayment begins 60 days after the final disbursement of the funds. We recommend students first utilize all eligibility for grants and the Federal Direct Loans before receiving a Federal PLUS. Funds are paid in multiple disbursements and given to the parent(s) after tuition and fees have been paid.

### STANDARDS OF ACADEMIC PROGRESS

Standards of Academic Progress (SAP) are a series of standards required to maintain eligibility for federal student aid. Requirements include qualitative and quantitative components of completion as defined below. Students who do not meet these requirements will be disqualified from future federal 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 Department of Higher Education (ODHE) approved degree or certificate. All students are subject to the evaluation of standards of academic progress.

Satisfactory academic progress is measured as:

- (1) GPA (qualitative measure): Overall grade point average of 2.0.
- (2) Completion rate (quantitative measure): Completion of 67% of the cumulative attempted credit hours, including hours of repeated and developmental coursework. All accepted transfer hours will also be included in this calculation. The calculated percentage will be subject to rounding to the nearest whole number based on standard mathematical rounding rules.
- (3) Maximum timeframe (quantitative measure): Completion of an ODHE-approved degree or certificate within the required number of credit hours as listed in the College catalog for the associate or certificate degree, multiplied by 150% as determined by Office of Financial Aid. This measure will include all accepted transfer credit hours and up to 30 attempted credit hours of required developmental coursework. If a student changes his or her major or is seeking a second degree, the percentage of completion does not start at zero percent. A student becomes ineligible, via the maximum timeframe element, at the point at which it becomes mathematically impossible for them to complete the program within 150%.
- (4) Successful financial aid grade completions are: A, AH, B, BH, C, UC, D, UD, CR.
- (5) Unsuccessful financial aid grade completions are: F, W, IN, NC. W, IN and NC grades do not affect the GPA but are included in the completion rate and maximum timeframe components of the SAP calculation. Once IN grades are changed, the student's GPA, completion rate and maximum timeframe components are recalculated. Courses in which a student remained enrolled past the add/drop period and earned a W grade cannot be excluded from the calculation.
- (6) Repeated coursework (see Policy 3357:15-13-08) will count toward the number of attempted hours for completion rate and maximum timeframe calculations. Only the highest grade will be used in the calculation of the student's GPA.
- (7) All students are limited to 30 credit hours of developmental coursework. Grades are assigned to developmental coursework and will be counted in the GPA, completion rate and maximum time frame calculations.

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

#### MONITORING PROGRESS

At the end of each term attended, a student's academic progress will be evaluated based upon the standards listed in the previous column, regardless of whether the student is currently receiving or has received federal financial aid in the past. If they fail to meet any of the listed requirements, they will receive electronic notification 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 their 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 their classes out of pocket until they are able to reach the 67% completion rate and a cumulative 2.0 GPA.

#### **APPEAL PROCESS**

If a student has unusual or mitigating circumstances that prevented a student from meeting the GPA, completion rate or maximum timeframe requirements, they may submit an appeal requesting to continue to receive federal financial aid. Mitigating circumstances must be documented and approved by the Financial Aid Appeals Committee. Mitigating circumstances that will be considered include: the death of a relative, an injury or illness of the student, or other special circumstances. The committee will evaluate whether the circumstances prevented the student from completing the SAP requirements and determine that the student will be successful in future terms. The appeal must be submitted within the term in which a student is applying for continued federal financial aid. A student may only submit two appeals during their 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 successfully complete all registered courses and achieve a 2.0 term grade point average. After one semester, if the student meets the probation requirements, the student will be placed on an academic plan and must continue to successfully complete all registered courses and maintain a term 2.0 GPA. As long as a student is meeting the requirements of the academic plan, they 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, they 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 Gateway student services 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 Financial Aid Appeals Committee comprised of a member(s) of the financial aid department will review the appeal and render a decision.

**STEP THREE:** A student will receive electronic notification of the decision of the Financial Aid Appeals Committee within 10 business days of the committee meeting. **The decision of the Financial Aid Appeals 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.

### STUDENT SERVICES

Stark State College provides non-instructional services to students. 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.

#### 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 Admissions Office, from the staff of any of the computer labs, at starkstate.edu and in the student handbook.

#### **HELP DESK SERVICES**

Help Desk Services provides technical support on systems used at the College. Access the Help Desk from mySSC, via phone at ext. HELP or in person in Room B219.

#### STARK STATE COLLEGE STORE

The College Store is your connection for all your textbook and course material requirements. Supplies and imprinted clothing are available in the College Store. Open year-round, the College Store also sells unique gifts, greeting cards and postage stamps, along with faxing and laminating services. Additional printing allowances and color copies can also be purchased. The College Store may be accessed online at shop.starkstate.edu. Main S105/G105; Akron A103.

#### **OPEN LABS AND WIRELESS ACCESS**

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

#### STUDENT CODE OF CONDUCT POLICY

Stark State College provides an engaging, supportive and empowering environment that creates the foundation for lifelong learning and individual professional development. The Student Code of Conduct is established to provide students a detailed list of prohibited behaviors for both on-campus and off-campus college-related activities, and disciplinary action(s) that can result in violating the Student Code of Conduct. The conduct code shall also apply to student conduct involving violations of federal, state or local laws. You also are expected to abide by the College's Student Code of Conduct Policy and Procedure as adopted by the Stark State College Board of Trustees and posted at starkstate.edu/policies.

#### 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 mySSC 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 their most recent federal income tax return.

#### 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 email.starkstate.net.

#### 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.

# DIVISION OF LEARNING AND ENGAGEMENT

The Division of Learning & Engagement provides support programs to assist students in achieving their academic goals at Stark State, including:

#### DIGITAL LIBRARY AND LEARNING RESOURCE CENTER

The Stark State Digital Library, available from any internet-enabled computer and physically located adjacent to the College Atrium, is a collection of digital resources and library services available to students. Librarians provide research and reference assistance face-to-face, through online chat (libguides.starkstate.edu/chatus), and even via text message (330-267-9272). For hours and more information, visit libguides.starkstate.edu/library or call 330-494-6170 ext. 4141.

For students looking for a more traditional library experience, the Digital Library partners with the Kent State University at Stark Library, commonly known as the Learning Resource Center. The Learning Resource Center is located east of the main student parking lot and serves both Stark State College and the Kent State University at Stark Campus. For current hours, visit kent.edu/stark/library or call 330-244-3330 for library information.

#### **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. 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.

Students are required to provide documentation of their disability, such as psychological, medical or school evaluations, 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 starkstate.edu/estarkstate-orientation.

#### **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 across Frank Avenue.

#### **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. Children may be enrolled by the semester. The center is located at the John Knox Presbyterian Church, 5155 Eastlake N.W., across the street from the campus. For child care rates, hours, registration information and more, call 330-499-0909.

#### **MILITARY SERVICES**

The Military Services department provides comprehensive enrollment and educational services to active duty military members, veterans and their dependents. These services include admissions, financial aid, career and academic advising support, as well as assistance with applying for VA educational benefits. For more information, stop by the Military Services Office, call 330-494-6170 ext. 4939 or visit starkstate.edu/militaryservices.

#### STUDENT SUPPORT AND JUDICIAL AFFAIRS

Student Support and Judicial Affairs Intervention Services assists students as they pursue their academic goals by promoting academic and personal development through individual consultation, workshops, outreach services, support groups and referrals offered by a trained, licensed mental health professional. These services are designed to provide support on an array of concerns including, but not limited to, mental health, substance abuse, behavioral concern and general lack of resource issues.

Additional services include training for the campus community in recognizing and handling students in need of assistance, developing and monitoring intervention plans, and providing emergency crisis counseling services. Student Support and Judicial Affairs is the initial point of contact for college-wide activities related to student due process and judicial proceedings within campus safety and security process.

#### THE TESTING CENTER

The Testing Center in C107 offers both computer-based and penciland-paper testing for specific courses on main campus and in A012 at SSC Akron. 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.

#### 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 students 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.

# STUDENT LIFE, EQUITY AND LEADERSHIP PROGRAMS

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. The Office of Student Life, Equity and Leadership Programs offers a wide variety of student clubs, activities and campus events to enhance the co-curricular experience. Students of diverse backgrounds, cultures, identities and experiences can find support including supplemental advising, identity-based mentoring and academic support referrals. Stark State is committed to student advocacy and building a supportive community among our diverse populations.

#### STUDENT DIVERSITY AND EQUITY OUTREACH

Stark State College acknowledges, respects and values differences among its students and provides academic support services to students representing various dimensions of diversity while providing cultural programming to enhance each student's campus experience. Access supplemental advising, identity-based mentoring, cultural based programming, and a welcoming and engaging environment through diversity and equity outreach. With a strong emphasis on student advocacy and support for our under-represented student communities, learn how we can assist you in your journey at Stark State. Cultural and identity-based recognitions are essential to the college experience. Students are encouraged to expand their cultural experiences through engagement with the campus community. Contact Student Diversity and Equity Outreach to get engaged and celebrate our various diverse populations throughout the academic year.

#### STUDENT LEADERSHIP ACADEMY

Student Leadership Academy is designed to help students develop valuable skills employers are seeking: communication, leadership, financial literacy, goal-setting, cultural competency and professionalism. This program allows students to build their resume, enhance their online professional presence and meet new people. No previous leadership experience is necessary. starkstate.edu/leadership

#### 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. The society provides its members with opportunities in the areas of scholarship, leadership, service and fellowship. The society has more than 3.5 million members and more than 1,300 chapters worldwide. The Beta Gamma Epsilon chapter of Phi Theta Kappa was established at Stark State College in 1996. To qualify for membership, you must have a cumulative GPA of 3.50 or higher in at least 12 hours of degree-related courses. To continue membership, you must maintain a cumulative GPA of 3.2. Students who qualify receive a letter of invitation during the fall, spring or summer semester. For more information, call the Office of Student Life, Equity and Leadership Programs at 330-494-6170 ext. 4237.

#### **PSI BETA PSYCHOLOGY HONORS CHAPTER**

Psi Beta Psychology Honor Society is a sister organization of Psi Chi and is designed to serve students at the community college level. The purpose of the Stark State College chapter of Psi Beta is to:

- Serve as a means of national recognition of the student's early interest in and dedication to the field of psychology and to scholastic achievement.
- Provide opportunities to become acquainted with and involved with the larger field of psychology.
- Provide a forum for developing one's perspective about psychology and for building a sense of community and identity with others in the field.

Additional goals include enhancing leadership skills and encouraging research, providing greater opportunity for student/faculty interaction outside the classroom, and to benefit the campus and community through programs and services. Members have earned an overall cumulative GPA of at least 3.25, including all transfer credits, have completed at least one introductory psychology course and 12 semester hours total college credit and have achieved a minimum 3.5 GPA in core psychology courses. Finally, members must maintain high standards of personal behavior and integrity and receive a 3/4 affirmative vote of the membership attending a regular chapter meeting.

#### MU ALPHA THETA MATHEMATICS HONOR SOCIETY

Mu Alpha Theta is the national mathematics honor society for two-year colleges dedicated to inspiring keen interest and developing strong scholarship in mathematics. The society rewards outstanding extracurricular achievement and has more than 105,000 members nationwide. Stark State's Mu Alpha Theta chapter was established in 1986 and was reactivated in 2015. The chapter promotes leadership skills, research and the enjoyment of mathematics and hosts an annual award ceremony where outstanding achievements in and out of the classroom are recognized. The chapter also networks with other clubs and participates in regional, state and national competitions. To be eligible for membership, you must have had at least one mathematics course at or above the precalculus, college algebra and trigonometry level and at least a 3.0 GPA overall in all college mathematics courses at or above the precalculus, college algebra and trigonometry level.

#### STUDENT GOVERNMENT ASSOCITAION

The Student Government Association (SGA) is the governing body for and official voice of the Stark State College student body. With a role in institutional governance, SGA represents your views and opinions to the College administration and provides student representatives to institutional governance committees.

#### 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 at starkstate.edu/student-organizations.

For more information, contact:

The Office of Student Life, Equity and Leadership Programs studentlife@starkstate.edu // Office S100 330-494-6170 ext. 4237 or 4034

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

The tuition schedule for the 2024-25 academic year follows and can be found online at starkstate.edu/tuition.

credit hours	total tuition (Ohio residents)
1	199.60
2	399.20
3	598.80
4	798.40
5	998.00
6	1,197.60
7	1,397.20
8	1,596.80
9	1,796.40
10	1,996.00
11	2,195.60
12	2,395.20
13	2,594.80
14	2,794.40
15	2,994.00
16 or more	3,193.60

out-of-state residents add \$129.00/credit hour to totals

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

- Admissions
- Business Office
- Cashier's Office
- Gateway Student Services

#### 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.

#### **Online Fee**

The online fee helps cover the cost of the College's Learning Management System (Blackboard), hosting services and course design and development.

#### **Out-Of-State Residents Tuition Surcharge**

A tuition surcharge is assessed to 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.

#### **Payment Plan Fee**

Students electing to use the payment plan to pay tuition and fees will be required to pay a small, 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 program tuition and class fees as well as state fees and semi rental for one CDL driving test. If the student does not pass the CDL test, they must pay for all fees associated with additional test attempts. This fee does not cover the student's required Department of Transportation physical or drug screen. Students are also responsible for the cost of the permit and any endorsements they wish to add.

#### **Law Enforcement Academy Fee**

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

#### **Health Record Management Fee**

This fee is used to cover costs of electronic filing and maintenance of personal health records. Personal health records are necessary for students to progress through their chosen program and gain access to clinical training sites.

#### 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)

This program is an alternative to the single payment of fees due at the beginning of each academic semester. A one-time \$25 non-refundable (convenience) fee is assessed at the time of the first partial payment.

A \$50 minimum payment must be made by the first initial payment deadline date. After the first initial payment deadline, there are three payment dates. Payments schedule: second payment - 14 days after initial payment, third - 30 days after second scheduled payment date, fourth payment date - 30 days after third scheduled payment date. To enroll in the installment plan, print and return the form to the cashier's window. The form is located at starkstate.edu/sipp or the Business Office.

#### **Selective Service Registration**

In accordance with Section 3345.32 of the Ohio Revised Code, if you are a male resident of Ohio, are less than 26 years of age, and are enrolling for courses at Stark State College, you must provide the College with current information concerning your status with the Federal Selective Service System. Even if you are an Ohio resident for fee purposes, if you fail to provide the college with this information, you will be charged a tuition surcharge equal to that of a non-resident student. Information about Selective Service is available at sss.gov.

#### **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 are being conducted in accordance with the class schedule must complete academic drop/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 the College does not permit to enroll
  or continue in coursework.
- Refunding of fees for the above circumstances is automatic and you are not required to complete academic withdrawal procedures.
- · The processing fee and all miscellaneous fees are not subject to refund.
- Instructional fees and general fees paid at the beginning of each semester are subject to refund to students who officially withdraw for valid reasons at the following rates:

16-week, 10-week, 8-week course:

- Before the eighth calendar day (excluding holidays and emergency closings) of the semester – 100% refund
- On the eighth through the fourteenth calendar day (excluding holidays and emergency closings) of the semester – 50% refund
- On the fifteenth calendar day (excluding holidays and emergency closings) of the semester and beyond – no refund

#### 5-week course

- Before the eighth calendar day (excluding holidays and emergency closings) of the semester – 100% refund
- On the fifteenth calendar day (excluding holidays and emergency closings) 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 throughout the semester to verify the last day attended in each class.

#### **Medical Withdrawal Policy**

In the event of a severe or life-threatening medical condition for you or an immediate family member, you may appeal for consideration above and beyond the normal refund policy. Appeals must be made in writing no later than 15 calendar 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 and completed Student Medical Withdrawal Form, which can be found on the mySSC portal in the Student Forms section. Verbal or incomplete requests will be refunded according to the normal refund policy. All appeals will be reviewed within 30 days of receipt, and you 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 Department of Higher Education 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 Department of Higher Education 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 that 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:

 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 12 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 Buckeye 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**

- 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.
- 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.
- 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.
- 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 website at starkstate.edu/policies at all times, including, but not exclusive to:

Academic Advising

Academic Forgiveness

Academic Honesty and Integrity

Academic Honors

Academic Probation and Dismissal

Academic Withdrawal Affirmative Action Anti-Harassment Attendance

Audit of Credit Courses

Class Attendance

College Computing Resources

Complaint Procedure

Concealed Weapons Consensual Relationships

Course Substitution

Credit by Proficiency Examination

Credit Residency Requirement

Dean's List

Early Alert

Final Grade Appeal

Final Grading System
Freedom of Expression and Responsibilities

Grade of Incomplete **Graduation Requirements** 

Grievance Procedures

Medical Withdrawal

Midterm Grade

Non-Payment Drop

President's List

Probation and Dismissal

Property Use

Registration Deadline

Sexual Assault

Smoking/Smokeless Tobacco Use

Standards of Academic Progress (SAP)

Student Code of Conduct

Student Records

Testing Your Faith

Transcripts and Articulation

Transfer Credit, Acceptance and Application

Withdrawal Procedure

The site is searchable at 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 starkstate.edu/policies. Requests for printed copies of policies and procedures, or questions regarding any policy or procedure, should be directed to the Provost's Office C101.

For the most current academic and student conduct policies, as well as additional policies and procedures of interest to students, go to starkstate.edu/policies. Printed copies may be requested in the Provost's Office C101.

### College Commitment to Scholastic Honesty, Student INTEGRITY AND HONESTY IN **FARNING**

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 starkstate.edu/policies. Any student who violates or assists another to violate the Honesty in Learning Policy will be penalized.

#### **ACADEMIC HONESTY AND INTEGRITY POLICY**

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 Academic Honesty and Integrity 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 commonknowledge) 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 that a student submits will be prepared in accordance with course quidelines.
- 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

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

### 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, registration, parking privileges, etc.) as native students on the basis of the number of credits earned. For more information about credit transfer: transfercredit.ohio.gov/.

#### **MILITARY TRANSFER ASSURANCE GUIDELINES (MTAGs)**

If you have served in the U.S. Armed Forces or National Guard, your training, experience and/or coursework may translate to college credit. All training, experience and coursework must first be recognized by the American Council on Education (ACE) or a regional accrediting body, such as the Higher Learning Commission (HLC), in order to be eligible to earn college credit.

Military Transfer Assurance Guides (MTAGs) provide a statewide guarantee that certain types of military training, experience and/or coursework align to existing college and university courses and will be awarded appropriate credit. The list of MTAGs approved for Stark State College by the Ohio Department of Higher Education can be found at www.starkstate.edu/mtags. More information about military transfer is also available at the Ohio Department of Higher Education, transfercredit.ohio.gov.

#### 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: 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: transferology.com/welcome.htm.

#### PRIOR LEARNING ASSESSMENT

To help students earn postsecondary certificates and degrees, Stark State College will advance and promote the awarding of credit to students for prior learning based on transparent, consistent and rigorous statewide standards. Assessing the prior learning of students recognizes that college-level learning is acquired through means in addition to credit course enrollment. Prior Learning Assessment (PLA) is a comprehensive phrase used to reference the evaluation methods to measure prior learning experience. PLA extends articulation and transfer policy to current professional licensure or certification; completion of formal training/certificate - including non-credit training; military transcript/ACE transcript; portfolio; divisional proficiency exam/challenge exam; personal interview; bypass prerequisites; or CLEP or AP up to the maximum established credit hours. PLA is evaluation of learning acquired outside of the college and is documented as "CR" credit.

#### **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.

#### **OHIO TRANSFER 36**

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: starkstate.edu/admissions/ohiotransfer36/.

COM121 COM122 ENG124 ENG221 ENG230 ENG231
MTH118 MTH124, MTH124A and MTH124B MTH125 MTH135 MTH135, MTH135A and MTH135B MTH223, MTH223A and MTH223B MTH224 MTH225 MTH226 MTH227
ENG233 ENG234 ENG235 ENG236 ENG237 ENG239 ENG240 ENG241 HIS121 HIS122 HIS222 PHL122
PSY121 PSY122 PSY123 PSY124 PSY220 PSY221 PSY231 PSY131 PSC121 BUS122 BUS221 BUS222 SOC121 SOC122 SOC122 SOC123 SOC225
BI0101 BI0121 BI0122 BI0122 BI0126 BI0127 BI0128 BI0129 BI0130 BI0141 BI0242 CHM100 CHM101 CHM103 CHM101 CHM123 CHM142 CHM1025 CHM241 CHM242 CHM242 CHM242 CHM241 CHM242 CHM242 CHM241 CHM242 CHM241 CHM242 CHM241 CHM242 CHM241 CHM242 CHM241 CHM242 CHM241 CHM242 CHM101 CHM242 CHM101 CHM242 CHM101 CHM242 CHM241 CHM242 CHM101 CHM242 CHM101 CHM121 CHM242 CHM101 CHM121 CHM242 CHM101 CHM121 CHM242 CHM101 CHM121 CHM101 CHM1121 CHM101 CHM1121 C

Diversity, Equity, and Inclusion

Diversity in American Society S0C225

+ Indicates courses offered at Kent State - Stark campus For the Transfer Module in chart form, starkstate.edu/ohiotransfer36

# 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 vears 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 Security Department
- Interfaith Campus Ministry
- Stark State College counseling services 330-494-6170 ext. 4219
- Quest Recovery and Prevention Services 330-453-8252

#### STARK STATE 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. In summary, the Stark State College concealed weapons policy states (as of March 21, 2017):

A) Except as provided in paragraph B below, the use, possession or carrying of a firearm or other weapon on property owned or leased by the College, by any person other than a College security officer or qualified law enforcement officer as defined in Section 2901.01(A)(11) of the Ohio Revised Code, is prohibited and in violation of State Law.

B) Pursuant to Ohio Revised Code Section 2923.126 (B)(5), any person licensed to carry a concealed handgun may have a handgun on property owned or leased by the College ONLY if it is in a locked motor vehicle or the licensee is in the immediate process of placing the handgun in a locked motor vehicle.

To view the College's official concealed weapons policy in its entirety, visit starkstate.edu/policies and click the Complete P & P link.

# VETERANS BENEFITS AND TRANSITIONS ACT OF 2018

To prevent institutions from charging late fees or preventing facility access to student veterans due to delay in payment for Chapter 33 Post 9/11 and Chapter 31 Vocational Rehab by the Department of Veterans Affairs (VA), the following policy has been adopted. This policy addendum took effect on August 1, 2019. Stark State College is in compliance with all requirements.

In accordance with Section 103 of the Veteran's Benefits Act of 2018, Stark State College will not impose any penalty including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the other requirement that recipients of Chapter 31 or Chapter 33 of the Gl Bill borrow additional funds to cover the individual's inability to meet his/her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veteran Affairs.



#### career community:

administrative services, legal assisting and court reporting

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. 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.



## ASSOCIATE OF APPLIED BUSINESS LEGAL ASSISTING

### **2024-25 Catalog**

Effective Summer 2024

2105



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency	
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency	
AOT129	Keyboarding Skill Building	1	AOT121	
AOT130	Editing, Proofreading and Language Skills	3		
AOT224	Legal Office Procedures ▲+	3	AOT121 and AOT130	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
AOT235	Legal Research and Writing ▲-	3		
AOT237	Legal Office Applications ▲-	3	AOT239 and AOT224	
AOT239	Legal Transcription ▲+	3	AOT130 and pre-co-AOT129	
JCR131	Legal Terminology	3		
PSC122	Introduction to Law and the Legal System^	3	IDS102 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 or AOT228	
ACC121	Introduction to Accounting	3		
BUS121	Business Administration^	3	IDS102 or Proficiency	
or	or	or	or	
PSC221	State and Local Government ▲ -	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or	Check for prerequisites	
MTH124	Statistics <sup>^</sup> Ω	3		
PSC121	U.S. Government and Politics	3		
PSC123	Government and Legal Ethics^▲+	3	IDS102 or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	<u>3</u>	Check for prerequisites	
	Total	31		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement score

Students completing this degree may be eligible to also receive a Legal Assisting One-Year Certificate (2106).

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>+++</sup>Legal Assisting should complete AOT237; AOP students should take AOT227; AOP Virtual students should take AOT228

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
AOT130	Editing, Proofreading and Language Skills	3	
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency
PSC122	Introduction to Law and the Legal System^	3	IDS102 or Proficiency
AOT127	Word Processing – Microsoft Word^	<u>3</u>	ITD100 or Proficiency
	•	16	•
Second Semester			
JCR131	Legal Terminology	3	
PSC121	U.S. Government and Politics	3	
AOT129	Keyboarding Skill Building	1	AOT121
AOT239	Legal Transcription ▲+	3	AOT130 and
			pre-co-AOT129
AOT224	Legal Office Procedures ▲+	3	AOT121 and AOT130
MTH118	Quantitative Reasoning^	3	
or	or	or	Check for prerequisites
MTH124	Statistics <sup>^</sup> Ω	<u>3</u>	encenje, p.e. equisites
	244.54.55	16	
Third Semester			
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
AOT237	Legal Office Applications ▲ -	3	AOT239 and AOT224
BUS121	Business Administration^	3	IDS102 or Proficiency
or	or	or	or
PSC221	State and Local Government ▲ -	3	IDS102 or Proficiency
AOT235	Legal Research and Writing ▲-	3	,
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency
ACC121	Introduction to Accounting	<u>3</u>	ibsio2 of Tronciency
1100121	introduction to recounting	<u>=</u> 16	
Fourth Semester		10	
COM121	Effective Speaking	3	
AOT132	Records Management <sup>^</sup> ▲+	3	IDS102 or Proficiency
AOT132 AOT232	AOT Practicum+++ $\blacktriangle$ +	2	AOT227 or AOT237 or
A01232			AOT228
PSC123	Government and Legal Ethics^▲+	3	IDS102 or Proficiency
Select one (1) Arts	& Humanities Elective from the list below <sup>1</sup>	<u>3</u>	Check for prerequisites
		14	
	TOTAL CREDITS	62	

<sup>^</sup>Based on SSC placement score

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>+++</sup>Legal Assisting should complete AOT237; AOP students should take AOT227; AOP Virtual students should take AOT228

<sup>▲ +</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup><u>Arts & Humanities Electives</u>: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



#### **ONE-YEAR CERTIFICATE**

#### **LEGAL ASSISTING**

**2024-25 Catalog** 

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2106



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency	
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency	
AOT129	Keyboarding Skill Building	1	AOT121	
AOT130	Editing, Proofreading, and Language Skills	3		
AOT224	Legal Office Procedures ▲+	3	AOT121 and AOT130	
AOT235	Legal Research and Writing ▲-	3		
АОТ239	Legal Transcription ▲+	3	AOT130 and pre-co-AOT129	
JCR131	Legal Terminology	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	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency	
PSC123	Government and Legal Ethics^▲+	3	IDS102 or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	11		
	TOTAL CREDIT HOURS	33		

<sup>^</sup>Based on SSC placement score

The classes in this certificate also apply toward the completion of a Legal Assisting Degree (2105).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲ +</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

#### **ONE-YEAR CERTIFICATE**

#### **LEGAL ASSISTING**

2106

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#### 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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency
AOT121	Keyboarding/Formatting	3	AOT101 or Proficiency
AOT130	Editing, Proofreading and Language Skills	3	
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency
AOT235	Legal Research and Writing ▲-	<u>3</u>	
		17	
Second Semester			
PSC123	Government and Legal Ethics <sup>^</sup> ▲+	3	IDS102 or Proficiency
JCR131	Legal Terminology	3	
AOT224	Legal Office Procedures ▲+	3	AOT121 and AOT130
AOT129	Keyboarding Skill Building	1	AOT121
AOT239	Legal Transcription ▲+	3	AOT130 and pre-co-AOT129
Select one (1) Arts	& Humanities Elective from the list below <sup>1</sup>	3 16	Check for prerequisites
	TOTAL CREDITS	33	

<sup>^</sup>Based on SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



#### ASSOCIATE OF APPLIED BUSINESS

#### **ADMINISTRATIVE OFFICE PROFESSIONAL**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT107	Digital Technologies^▲-	1	ITD100 or Proficiency	
AOT110	Introduction to Administrative Assisting ▲-	1		
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency	
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency	
AOT128	Document Development and Website Maintenance^▲+	3	ITD100 or Proficiency	
AOT129	Keyboarding Skill Building	1	AOT121	
AOT130	Editing, Proofreading and Language Skills	3		
AOT134	Form Design Essentials	1	AOT127	
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency	
AOT236	Database Applications – Microsoft Access^▲+	3	ITD100 or Proficiency	
ACC121	Introduction to Accounting	3		
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency	
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency	
ITD122	Computer Applications for Professionals^*	3	ITD100 or Proficiency	
	Total	32	, in the second	
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	20111/1 2001
JCR131	Legal Terminology	3	, , , , , , , , , , , , , , , , , , , ,	
or	or	or		
BIO125	Medical Terminology	3		
AOT132	Records Management^▲+	3	IDS102 or Proficiency	
AOT227	Administrative Procedures and Systems ▲-	3	(ITD122 or AOT127) and AOT130 and (AOT121 or AOT129)	
AOT232	AOT Practicum+++ ▲+	2	AOT227 or AOT237 or AOT228	
BUS121	Business Administration^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or	Check for prerequisites	
MTH124	Statistics <sup>^</sup> Ω	3		
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
PSY121	General Psychology^	3	IDS102 or Proficiency	
or	or	or	or	
SOC121	Sociology^	3	IDS102 or Proficiency	
	Total	30		
	TOTAL CREDIT HOURS	62		

<sup>\*</sup>Check back page for footnotes

Students completing this degree may be eligible to also receive an Administrative Office Professional One-Year Certificate (2122), an Administrative Services and Office Applications – Desktop Publishing Career Enhancement Certificate (2156), and an Administrative Services and Office Applications – Formatting and Office Skills Career Enhancement Certificate (2127).

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#### 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
AOT110	Introduction to Administrative Assisting ▲-	1	Tune just semeste.
AOT130	Editing, Proofreading and Language Skills	3	
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency
ITD122	Computer Applications for Professionals^*	3	ITD100 or Proficiency
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency
AOT127	Word Processing – Microsoft Word^	<u>3</u>	ITD100 or Proficiency
		<del>-</del> 7	•
Second Semester			
BUS121	Business Administration^	3	IDS102 or Proficiency
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
AOT134	Form Design Essentials	1	AOT127
AOT129	Keyboarding Skill Building	1	AOT121
AOT128	Document Development and Website	3	ITD100 or Proficiency
AO1126	Maintenance^ ▲ +	3	11D100 of Fioliciency
AOT132	Records Management^▲+	3	IDS102 or Proficiency
MTH118	Quantitative Reasoning^	3	
or	or	or	Check for prerequisites
MTH124	Statistics <sup>^</sup> Ω	<u>3</u>	
		17	
Third Semester			
AOT226	Spreadsheet – Microsoft Excel <sup>^</sup>	3	ITD100 or Proficiency
AOT227	Administrative Procedures and Systems ▲-	3	(ITD122 or AOT127) and AOT130 and
			(AOT121 or AOT129)
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency
JCR131	Legal Terminology	3	
or	or	or	
BIO125	Medical Terminology	3	
PSY121	General Psychology^	3	IDS102 or Proficiency
or	or	or	or
SOC121	Sociology^	3	IDS102 or Proficiency
AOT107	Digital Technologies^▲-	<u>1</u>	ITD100 or Proficiency
E 4.0		14	
Fourth Semester	Table A. A.	2	
ACC121	Introduction to Accounting	3	
COM121	Effective Speaking	3	A O T 2 2 7 A O T 2 2 7
AOT232	AOT Practicum+++ ▲+	2	AOT227 or AOT237 or AOT228
AOT236	Database Applications – Microsoft Access^ +	3	ITD100 or Proficiency
select one (1) Arts	& Humanities Elective from the list below <sup>1</sup>	<u>3</u> 14	Check for prerequisites
	TOTAL CDEDITS	14 62	
	TOTAL CREDITS	02	

<sup>^</sup>Based on SSC placement score.

 $\Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

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

<sup>+++</sup>Legal Assisting should complete AOT237; AOP students should take AOT227; AOP Virtual students should take AOT228

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

 $<sup>\</sup>blacktriangle$  - Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



#### **ONE-YEAR CERTIFICATE**

#### **ADMINISTRATIVE OFFICE PROFESSIONAL**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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2122



Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT107	Digital Technologies^▲-	1	ITD100 or Proficiency	
AOT110	Introduction to Administrative Assisting ▲-	1		
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency	
AOT130	Editing, Proofreading and Language Skills	3		
AOT132	Records Management^▲+	3	IDS102 or Proficiency	
AOT134	Form Design Essentials	1	AOT127	
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency	
AOT227	Administrative Procedures and Systems ▲-	3	(ITD122 or AOT127) and AOT130 and (AOT121 or AOT129)	
AOT236	Database Applications – Microsoft Access^ ▲+	3	ITD100 or Proficiency	
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency	
	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	Co-ENG024 or Co-ENG011 or Proficiency	
JCR131 or BIO125	Legal Terminology  or  Medical Terminology	3 <b>or</b> 3		
ITD122	Computer Applications for Professionals^*	3	ITD100 or Proficiency	
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency	
	Total	13		
	TOTAL CREDIT HOURS	35		

<sup>^</sup>Based on SSC placement score

- \*Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
- ▲- Fall only courses. Please see your academic advisor for availability.
- ▲+Spring only courses. Please see your academic advisor for availability.

The classes in this certificate also apply toward the completion of an Administrative Office Professional Degree (2120).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

#### **ONE-YEAR CERTIFICATE**

#### ADMINISTRATIVE OFFICE PROFESSIONAL

2122

#### 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 students seeking a one-year certificate.

First Semester (Spring)		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
AOT130	Editing, Proofreading and Language Skills	3	
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency
AOT132	Records Management^▲+	3	
AOT236	Database Applications – Microsoft Access^ ▲+	<u>3</u>	ITD100 or Proficiency
		16	
Second Semester (Summer)			
ITD122	Computer Applications for Professionals <sup>^</sup> ♣	3	ITD100 or Proficiency
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency
ITD108	Microsoft Outlook^	<u>1</u>	IDS102 or Proficiency
		7	
Third Semester (Fall)			
JCR131	Legal Terminology	3	
or	or	or	
BIO125	Medical Terminology	3	
AOT107	Digital Technologies^▲-	1	ITD100 or Proficiency
AOT110	Introduction to Administrative Assisting ▲-	1	
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency
AOT134	Form Design Essentials	1	AOT127
AOT227	Administrative Procedures and Systems ▲-	<u>3</u>	(ITD122 or AOT127) and AOT130 and (AOT121 or AOT129)
		12	
	TOTAL CREDITS	35	

<sup>^</sup>Based on SSC placement score

- \*Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
- ▲- Fall only courses. Please see your academic advisor for availability.
- ▲+Spring only courses. Please see your academic advisor for availability.

<sup>^^</sup>To promote student success, this course should be taken in the first semester



#### ASSOCIATE OF APPLIED BUSINESS

## ADMINISTRATIVE OFFICE PROFESSIONAL – MANAGEMENT MAJOR

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

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Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT110	Introduction to Administrative Assisting ▲-	1		
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency	
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency	
AOT130	Editing, Proofreading and Language Skills	3		
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency	
AOT236	Database Applications Microsoft Access^ ▲+	3	ITD100 or Proficiency	
ACC121	Introduction to Accounting	3		
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)	
ITD140	Digital Project Management <sup>^</sup> ▲-	3	ITD100 or Proficiency	
MGT121	Principles of Management	3	BUS121 or ENT120	
AOT128	Document Development and Website Maintenance^ \( \blacktriangle + \)	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	
AOT227	Administrative Procedures and Systems ▲-	3	(ITD122 or AOT127) and AOT130 and (AOT121 or AOT129)	
AOT232	AOT Practicum+++ ▲+	2	AOT227 or AOT237 or AOT228	
BUS121	Business Administration^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency	
MGT221	Supervision	3	MGT121	
MTH118	Quantitative Reasoning^	3		
or	or	or	Check for prerequisites	
MTH124	Statistics <sup>^</sup> Ω	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
0r	or	or	or	
SOC121	Sociology^	3	IDS102 or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	31		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement score

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>+++</sup>Legal Assisting should complete AOT237; AOP students should take AOT227; AOP Virtual students should take AOT228

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

Effective Summer 2024

## ADMINISTRATIVE OFFICE PROFESSIONAL – MANAGEMENT MAJOR

2123

#### 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
AOT110	Introduction to Administrative Assisting ▲-	1	J
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
AOT130	Editing, Proofreading and Language Skills	3	-
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency
ITD140	Digital Project Management <sup>^</sup> ▲ -	3	ITD100 or Proficiency
BUS121	Business Administration^	<u>3</u>	IDS102 or Proficiency
		17	
Second Semester		2	
ACC121	Introduction to Accounting	3	TTT 100 T 07 !
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency
MGT121	Principles of Management	3	BUS121 or ENT120
AOT128	Document Development and Website Maintenance^▲+	3	ITD100 or Proficiency
MTH118	Quantitative Reasoning^		
or	or	<u>3</u>	Check for prerequisites
MTH124	Statistics <sup>^</sup> Ω	_	<i>v</i> 1 1
		15	
Third Semester			
AOT226	Spreadsheet – Microsoft Excel <sup>^</sup>	3	ITD100 or Proficiency
			(ITD122 or AOT127) and
AOT227	Administrative Procedures and Systems ▲-	3	AOT130 and
TTT 100			(AOT121 or AOT129)
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
or	or G i l i	or	or
SOC121	Sociology^	3	IDS102 or Proficiency
MGT221	Supervision	3	MGT121
Select one (1) Arts &	Humanities Elective from the list below <sup>1</sup>	<u>3</u>	Check for prerequisites
Fourth Semester		16	
COM121	Effective Speaking	3	
AOT236	Database Applications Microsoft Access^ +	3	ITD100 or Proficiency
AOT132	Records Management^ +	3	IDS102 or Proficiency
AOT232	AOT Practicum+++ <b>A</b> +	2	AOT227 or AOT237 or AOT228
			pre-(ACC121 or ACC132) and
ACC229	Accounting Software and Analytics	<u>3</u>	pre-co-(AOT226 or ITD122)
		14	- ,
1 CCC - 1	TOTAL CREDITS	62	

<sup>^</sup>Based on SSC placement score

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>+++</sup>Legal Assisting should complete AOT237; AOP students should take AOT227; AOP Virtual students should take AOT228

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



#### ASSOCIATE OF APPLIED BUSINESS

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### EGE

## ADMINISTRATIVE OFFICE PROFESSIONAL – VIRTUAL OFFICE PROFESSIONAL MAJOR

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT107	Digital Technologies^▲-	1	ITD100 or Proficiency	
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency	
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency	
AOT128	Document Development and Website Maintenance^▲+	3	ITD100 or Proficiency	
AOT130	Editing, Proofreading and Language Skills	3		
AOT140	Virtual Assistant Fundamentals^▲-	1	ITD100 or Proficiency	
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency	
AOT228	Virtual Administrative Assistant Procedures ▲-	3	AOT140	
AOT232	AOT Practicum+++ ▲+	2	AOT227 or AOT237 or AOT228	
AOT236	Database Applications – Microsoft Access^ ▲+	3	ITD100 or Proficiency	
ACC121	Introduction to Accounting	3		
ITD122	Computer Applications for Professionals^*	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	
ACC130	Business Law and Ethics	3	·	
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)	
AOT134	Form Design Essentials	1	AOT127	
BUS121	Business Administration^	3	IDS102 or Proficiency	
COM122	Interpersonal Communication	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENT120	Entrepreneurship^	3	IDS102 or Proficiency	
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency	
MTH118	Quantitative Reasoning^	3	-	
or	or	or	Check for prerequisites	
MTH124	Statistics <sup>^</sup> Ω	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
or	or	or	or	
SOC121	Sociology^	3	IDS102 or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	<u>3</u>	Check for prerequisites	
	Total	30		
	TOTAL CREDIT HOURS	61		

<sup>^</sup>Based on SSC placement score

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>+++</sup>Legal Assisting should complete AOT237; AOP students should take AOT227; AOP Virtual students should take AOT228

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

 $<sup>\</sup>blacktriangle + Spring only courses. Please see your academic advisor for availability.$ 

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

Effective Summer 2024

## ADMINISTRATIVE OFFICE PROFESSIONAL – VIRTUAL OFFICE PROFESSIONAL MAJOR

2124

#### 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
AOT130	Editing, Proofreading and Language Skills	3	•
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency
ITD122	Computer Applications for Professionals <sup>^</sup> ♣	3	ITD100 or Proficiency
AOT140	Virtual Assistant Fundamentals^▲-	1	ITD100 or Proficiency
AOT127	Word Processing – Microsoft Word^	<u>3</u>	ITD100 or Proficiency
Second Semester		17	
BUS121	Business Administration^	3	IDS102 or Proficiency
ACC121	Introduction to Accounting	3	12 2 10 2 01 1 10 110 110 110 110 110 11
	Document Development and Website		
AOT128	Maintenance^ ▲ +	3	ITD100 or Proficiency
ENT120	Entrepreneurship^	3	IDS102 or Proficiency
MTH118	Quantitative Reasoning^	3	,
or	or	or	Check for prerequisites
MTH124	Statistics <sup>^</sup> Ω	<u>3</u>	
		15	
Third Semester			
ITD108	Microsoft Outlook^	1	IDS102 or Proficiency
AOT107	Digital Technologies^▲-	1	ITD100 or Proficiency
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency
AOT228	Virtual Administrative Assistant Procedures ▲-	3	AOT140
ACC130	Business Law and Ethics	3	
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
or	or	or	or
SOC121	Sociology^	3	IDS102 or Proficiency
ACC229	Accounting Software and Analytics	<u>3</u>	pre-(ACC121 or ACC132) and
	· ·	_ 17	pre-co-(AOT226 or ITD122)
Fourth Semester		17	
Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>		3	Check for prerequisites
AOT134	Form Design Essentials	1	AOT127
COM122	Interpersonal Communication	3	
AOT232	AOT Practicum+++ ▲+	2	AOT227 or AOT237 or AOT228
AOT236	Database Applications – Microsoft Access^ ▲+	<u>3</u> 12	ITD100 or Proficiency
	••	12	-
1 000 1	TOTAL CREDITS	61	

<sup>^</sup>Based on SSC placement score

 $\Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>+++</sup>Legal Assisting should complete AOT237; AOP students should take AOT227; AOP Virtual students should take AOT228

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

 $<sup>^{1}\</sup>underline{Arts\ \&\ Humanities\ Electives}: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122, HIS222, HIS22$ 



JUDICIAL COURT REPORTING MAJOR

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

2024-25 Catalog
Effective Summer 2024

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2158

Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number		Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
JCR1001	Clark	Realtime Theory I (8-week)	3		
JCR1002	Stark	Realtime Theory II (8-week)	3	JCR1001	
JCR1003	Clark	Realtime Applications (8-week)	3	JCR1002	
JCR1101	Clark	Skill Building I (8-week)	3	JCR1003	
JCR1102	Stark	Skill Building II (8-week)	3	JCR1101	
JCR2103	Clark	Skill Building III (8-week)	3	JCR1102	
JCR2104	Stark	Skill Building IV (8-week)	3	JCR2103	
JCR2105	Clark	Skill Building V (8-week)	3	JCR2104	
JCR2106	Stark	Skill Building VI (8-week)	3	JCR2105	
JCR2200	Clark	Realtime Business Procedures	3		
JCR2300	Clark	CAT Transcription Production	2	JCR2200	
JCR2400	Stark JCR Internship		2	Department Chair approval	
		Total	34		
NON-TECH Course Number		Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FYE1100	Clark	College Success	1		
or	or	or	or	Take first semester	
SSC101	Stark	Student Success Seminar^^	1		
AOT121	Stark	Keyboarding/Formatting^	3	AOT101 or Proficiency	
AOT130	Stark	Editing, Proofreading and Language Skills	3		
BIO125	Stark	Medical Terminology	3	D A ' DI A	
ENG1111	Clark	English I	3	Pre: Appropriate Placement; Pre/Co: ENG 0980 grade of C↑	
ENG2211	Clark	Business Communication	3	ENG 1111 or OAD 1105	
ITD122	Stark	Computer Applications for Professionals^♣	3	ITD100 or Proficiency	
JCR131	Stark	Legal Terminology	3		
MTH1060	Clark	Business Math	3	Pre/Co: ENG 0980 grade of C↑; NextGen Accuplacer math score of 220↑	
PHL122	Stark	Ethics	3		
	Clark	Social/Behavioral Science Elective	3		
		Total	31		
		TOTAL CREDIT HOURS	65		

<sup>^</sup>Based upon SSC placement score.

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

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122.

<sup>↑ (</sup>or better)

### **JUDICIAL COURT REPORTING MAJOR**

2158

#### 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 JCR program for more information.

First Semester	<u>College</u>	Name of Course	Credit Hours	Pre- and Co-requisites
FYE1100	Clark	College Readiness	1	Take first semester
or	or	or	or	or
SSC101	Stark	Student Success Seminar^^	1	Take first semester
ENG1111	Clark	English 1	3	Pre: Appropriate Placement; Pre/Co: ENG 0980 grade of C↑
AOT121	Stark	Keyboarding/Formatting^	3	AOT101 or Proficiency
ITD122	Stark	Computer Applications for Professionals <sup>^</sup> ♣	3	ITD100 or Proficiency
JCR1001	Clark	Realtime Theory I (8-week)	3	
JCR1002	Stark	Realtime Theory II (8-week)	<u>3</u> 16	JCR1001
Second Semester				
JCR1003	Clark	Realtime Theory Applications (8-week)	3	JCR1002
JCR1101	Clark	Skill Building I (8 week)	3	JCR1003
JCR131	Stark	Legal Terminology	3	
AOT130	Stark	Editing, Proofreading and Language Skills	3	
MTH1060	Clark	Business Math	<u>3</u>	Pre/Co: ENG 0980 grade of C↑; NextGen Accuplacer math score of 220↑
			15	·
Summer Semester				
JCR1102	Stark	Skill Building II (8 week)	3	JCR1101
BIO125	Stark	Medical Terminology	<u>3</u>	
			6	
Third Semester				
JCR2103	Clark	Skill Building III (8 week)	3	JCR1102
JCR2104	Stark	Skill Building IV (8-week)	3	JCR2103
ENG2211	Clark	Business Communication	3	ENG 1111 or OAD 1105
JCR2200	Clark	Realtime Business Procedures	3	
PHL122	Stark	Ethics	<u>3</u>	
			15	
Fourth Semester				
JCR2105	Clark	Skill Building V (8-week)	3	JCR2104
JCR2106	Stark	Skill Building VI (8-week)	3	JCR2105
JCR2400	Stark	JCR Internship	2	Department Chair approval
JCR2300	Clark	CAT Transcript Production	2	JCR2200
	Clark	Social/Behavioral Science Elective	<u>3</u>	
			13	
		TOTAL CREDITS	65	

<sup>^</sup>Based upon SSC placement score.

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

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122.

↑ (or better)



### CAREER ENHANCEMENT CERTIFICATE

# ADMINISTRATIVE SERVICES AND OFFICE APPLICATIONS – FORMATTING AND OFFICE SKILLS

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

**2024-25 Catalog** 

Effective Summer 2024

2127



Business, Engineering, and Information Technology Division

Digital Media and Administrative Technologies Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency	
AOT129	Keyboarding Skill Building	1	AOT121	
AOT130	Editing, Proofreading, and Language Skills	3		
AOT132	Records Management <sup>^</sup> ▲+	3	IDS102 or Proficiency	
AOT127	Word Processing - Microsoft Word^	3	ITD100 or Proficiency	
ITD122	Computer Applications for Professionals <sup>^</sup> ♣	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
ITD122	Computer Applications for Professionals <sup>^</sup> ♣	3	ITD100 or Proficiency
AOT121	Keyboarding/Formatting^	3	AOT101 or Proficiency
AOT130	Editing, Proofreading, and Language Skills	<u>3</u>	
		9	
Second Semester			
AOT129	Keyboarding Skill Building	1	AOT121
AOT132	Records Management <sup>^</sup> ▲+	3	IDS102 or Proficiency
AOT127	Word Processing - Microsoft Word^	<u>3</u>	ITD100 or Proficiency
		7	
	TOTAL CREDITS	16	

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of an Administrative Office Professional Degree (2120).

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



## MAP

#### CAREER ENHANCEMENT CERTIFICATE

# ADMINISTRATIVE SERVICES AND OFFICE APPLICATIONS – DESKTOP PUBLISHING

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

2024-25 Catalog
Effective Summer 2024

2156

Business, Engineering, and Information Technology Division

Digital Media and Administrative Technologies Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency	
AOT128	Document Development and Website Maintenance^▲+	3	ITD100 or Proficiency	
AOT130	Editing, Proofreading and Language Skills	3		
AOT134	Form Design Essentials	1	AOT127	
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency	
ITD122	Computer Applications for Professionals^	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 <sup>^</sup> ♣	3	ITD100 or Proficiency
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency
IMT122	Graphic Arts Design^	<u>3</u>	ITD100 or Proficiency
		9	
Second Semester			
AOT128	Document Development and Website	3	ITD100 or Proficiency
	Maintenance <sup>^</sup> ▲ +		
AOT134	Form Design Essentials	1	AOT127
AOT130	Editing, Proofreading and Language Skills	<u>3</u>	
		7	
	TOTAL CREDITS	16	

<sup>^</sup>Based upon SSC placement score

- ♣ Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122
- ▲+ Spring only courses. Please see your academic advisor for availability.

The classes in this certificate also apply toward the completion of an Administrative Office Professional Degree (2120).



# CAREER ENHANCEMENT CERTIFICATE PROFESSIONAL DIGITAL REPORTER

2024-25 Catalog

Effective Summer 2024

2160

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-

Business, Engineering, and Information Technology Division

Digital Media and Administrative Technologies Department

Course Number		Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT130	Stark	Editing, Proofreading & Language Skills (16-week course)	3		
JCR131	Stark	Legal Terminology (First 8-week course)	3		
JCR2200	Clark	Realtime Business Procedures (First 8-week course)	3		
PDR1501	Clark	Digital Reporting Concepts (First 8-week course)	2		
JCR2300	Clark	CAT Transcript Production (Second 8-week course)	2	JCR2200	
MST1105	Clark	Medical Terminology (Second 8-week course)	2	ENG0800	
PDR1502	Stark	Digital Reporting Applications (Second 8-week course)	2	PDR1501	
		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 8 Weeks	College		Credit Hours	Pre- and Co-requisites
AOT130	Stark	Editing, Proofreading & Language Skills	3	
JCR131	Stark	Legal Terminology	3	
JCR2200	Clark	Realtime Business Procedures	3	
PDR1501	Clark	Digital Reporting Concepts	2	
Second 8 Weeks				
AOT130 (Cont'd)	Stark	Editing, Proofreading & Language Skills	-	
JCR2300	Clark	CAT Transcript Production	2	JCR2200
MST1105	Clark	Medical Terminology	2	ENG0800
PDR1502	Stark	Digital Reporting Applications	<u>2</u>	PDR1501
		<b>Total Credits</b>	17	



# CAREER ENHANCEMENT CERTIFICATE PROFESSIONAL DIGITAL EDITOR

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**2024-25 Catalog** 

Effective Summer 2024

2161

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technology Division

Digital Media and Administrative Technologies Department

Course Number		Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT130	Stark	Editing, Proofreading & Language Skills (16-week course)	3		
JCR131	Stark	Legal Terminology (First 8-week course)	3		
JCR2200	Clark	Realtime Business Procedures (First 8-week course)	3		
JCR2300	Clark	CAT Transcript Production (Second 8-week course)	2	JCR2200	
ITD102	Stark	Computer Applications – Word^ (Second 8-week course)	1	ITD100 or Proficiency	
MST1105	Clark	Medical Terminology (Second 8-week course)	2	ENG0800	
PDE1402	Clark	Digital Editing Applications (Second 8-week course)	2	JCR2200	
		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 8 Weeks	College		Credit Hours	Pre- and Co-requisites
AOT130	Stark	Editing, Proofreading & Language Skills	3	
JCR131	Stark	Legal Terminology	3	
JCR2200	Clark	Realtime Business Procedures	3	
Second 8 Weeks				
AOT130 (Cont'd)	Stark	Editing, Proofreading & Language Skills	-	
JCR2300	Clark	CAT Transcript Production	2	JCR2200
ITD102	Stark	Computer Application – Word^	1	ITD100 or Proficiency
MST1105	Clark	Medical Terminology	2	ENG0800
PDE1402	Clark	Digital Editing Applications	<u>2</u>	JCR2200
		<b>Total Credits</b>	16	

<sup>^</sup>Based upon SSC placement score



#### CAREER ENHANCEMENT CERTIFICATE

**2024-25 Catalog** 

Effective Summer 2024

5024



### **ADMINISTRATIVE SERVICES AND OFFICE APPLICATIONS – MICROSOFT** Office **APPLICATIONS PROFESSIONAL**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technology Division

Digital Media and Administrative Technologies Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency	
AOT128	Document Development and Website Maintenance ▲+	3	ITD100 or Proficiency	
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency	
AOT236	Database Applications – Microsoft Access^ ▲+	3	ITD100 or Proficiency	
ITD104	Computer Applications – PowerPoint^	1	ITD100 or Proficiency	
ITD108	Microsoft – Outlook^	1	IDS102 or Proficiency	
ITD140	Digital Project Management^▲-	3	ITD100 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
AOT127	Word Processing – Microsoft Word^	3	ITD100 or Proficiency
ITD140	Digital Project Management^▲-	3	ITD100 or Proficiency
ITD108	Microsoft – Outlook^	<u>1</u>	IDS102 or Proficiency
		7	
Second Semester			
ITD104	Computer Applications – PowerPoint^	1	ITD100 or Proficiency
AOT128	Document Development and Website Maintenance A+	3	ITD100 or Proficiency
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency
AOT236	Database Applications – Microsoft Access^ ▲+	<u>3</u>	ITD100 or Proficiency
		10	
	TOTAL CREDITS	17	

<sup>^</sup>Based upon SSC placement score

- ▲+ Spring only courses. Please see your academic advisor for availability.
- ▲- Fall only courses. Please see your academic advisor for availability.



### career community:

business and accounting

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. 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.



**ACCOUNTING - CORPORATE MAJOR** 

## 2024-25 Catalog

#### Effective Summer 2024

2001



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	3	ACC221	
ACC223	Cost Accounting	4	ACC133	
ACC238	Financial Statement Analysis	3	ACC133	
TECHNICAL EL	ECTIVES: Choose two (2) courses			
ACC226	Advanced Accounting	3	pre-co-ACC221	
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132	
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)	
ACC232	Governmental and Not-for-Profit Accounting	3	ACC221	
	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 and Ethics	3		
ACC225	Auditing♦	4	pre-co-ACC222	
or ACC237	or Forensic Accounting and Fraud Examination◆^	or 3	<b>or</b> IDS102 <b>or</b> Proficiency	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
FIN220	Business Finance	3	ACC133	
MTH124 or	Statistics^	3 <b>or</b>	Check for prerequisites	
MTH125	College Algebra^	4	check for prorequisites	
11111120	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	31-33		
	TOTAL CREDIT HOURS	63-65		

<sup>^</sup>Based upon SSC placement score

Students completing this degree may be eligible to also receive a Bookkeeping Certificate (2004) and a QuickBooks/Payroll Career Enhancement Certificate (2018).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>◆</sup>Course should be chosen following consultation with academic advisor.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS124	Business Analysis^	3	(MTH022 or MTH023 or
			proficiency) and (IDS102 or
ENG124	C-11 C	3	proficiency) Co-ENG024 <b>or</b> Co-ENG011
ENG124	College Composition^	3	or Proficiency
ACC132	Financial Accounting*	4	pre-co-BUS124
AOT226	Spreadsheet - Microsoft Excel <sup>^</sup>	3	ITD100 or Proficiency
ACC130	Business Law and Ethics	<u>3</u>	11D100 of 11onelency
1100130	Dusiness Law and Etines	<u>≃</u> 17	
Second Semester		17	
MTH124	Statistics^	3	
0r	or	or	Check for prerequisites
MTH125	College Algebra^	4	encential presequiation
ACC133	Managerial Accounting	4	ACC132
BUS221	Microeconomics^	3	IDS102 or Proficiency
COM121	Effective Speaking	3	
ACC221	Intermediate Accounting I	<u>4</u>	ACC132
		17-18	
Third Semester			
ACC222	Intermediate Accounting II	3	ACC221
ACC223	Cost Accounting	4	ACC133
ACC131	Taxation I	4	ACC132
Technical Elective	2	<u>3</u>	Check for prerequisites
		14	
Fourth Semester			
Arts & Humanities	Elective <sup>1</sup>	3	Check for prerequisites
ACC225	Auditing♦	4	pre-co-ACC222
or	or	or	or
ACC237	Forensic Accounting and Fraud Examination	3	IDS102 or Proficiency
FIN220	Business Finance	3	ACC133
ACC238	Financial Statement Analysis	3	ACC133
Technical Elective <sup>2</sup>		<u>3</u>	Check for prerequisites
		15-16	
	TOTAL CREDITS	63-65	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>◆</sup>Course should be chosen following consultation with academic advisor.

<sup>&</sup>lt;sup>1</sup> <u>Arts & Humanities Elective</u>: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

<sup>&</sup>lt;sup>2</sup> Technical Electives: ACC226, ACC227, ACC229, ACC232



### **ACCOUNTING - CPA MAJOR**

2024-25 Catalog
Effective Summer 2024

2002



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	3	ACC221	
ACC225	Auditing	4	pre-co-ACC222	
ACC226	Advanced Accounting	3	pre-co-ACC221	
ACC231	Taxation II	3	ACC131	
ACC232	Governmental and Not-for-Profit Accounting	3	ACC221	
	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 and Ethics	3		
ACC223	Cost Accounting	4	ACC133	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
ACC238	Financial Statement Analysis	3	ACC133	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
FIN220	Business Finance	3	ACC133	
MTH124 <b>or</b> MTH125	Statistics^ or College Algebra^	3 <b>or</b> 4	Check for prerequisites	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	32-33		
	TOTAL CREDIT HOURS	64-65		

<sup>^</sup>Based upon SSC placement score

Students completing this degree may be eligible to also receive a Tax Preparer Career Enhancement Certificate (2017).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

### **ACCOUNTING - CPA MAJOR**

2002

#### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
ACC132	Financial Accounting*	<u>4</u> 14	pre-co-BUS124
Second Semester			
MTH124	Statistics^	3	
0r	<b>or</b> College Algebra^	<b>or</b> 4	Check for prerequisites
MTH125 ACC133	Managerial Accounting	4	ACC132
ACC130	Business Law and Ethics	3	1100132
ACC131	Taxation I	4	ACC132
BUS221	Microeconomics^	<u>3</u>	IDS102 or Proficiency
		 17-18	Ž
Third Semester			
ACC221	Intermediate Accounting I	4	ACC132
ACC238	Financial Statement Analysis	3	ACC133
ACC231	Taxation II	3	ACC131
FIN220	Business Finance	3	ACC133
ACC223	Cost Accounting	<u>4</u>	ACC133
		17	
Fourth Semester			
ACC222	Intermediate Accounting II	3	ACC221
ACC225	Auditing	4	pre-co-ACC222
ACC232	Governmental and Not-for-Profit Accounting	3	ACC221
Arts & Humanitie	es Elective <sup>1</sup>	3	Check for prerequisites
ACC226	Advanced Accounting	<u>3</u>	pre-co-ACC221
		16	
	TOTAL CREDITS	64-65	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



## ONE-YEAR CERTIFICATE

#### **BOOKKEEPING**

The catalog in force is assigned to students based on the academic year they first applied to the college, and

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2004



changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132	
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)	
	Total	18		
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 and Ethics	3		
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
	Total	16		
	TOTAL CREDIT HOURS	34		

<sup>^</sup>Based upon SSC placement score

Students completing this certificate may be eligible to also receive a QuickBooks/Payroll Career Enhancement Certificate (2018). The classes in this certificate also apply toward the completion of an Accounting – Corporate Major Degree (2001) and Accounting - Computer-Information Major Degree (2008).

To become a Certified Bookkeeper, students must pass an exam administered by the American Institute of Professional Bookkeepers or by the National Association of Certified Public Bookkeepers.

To become a Certified Payroll Professional or achieve the Fundamental Payroll Certification, students must pass an exam administered by the American Payroll Association.

To become a QuickBooks Certified User, students must pass an exam administered by Certiport.

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

# ONE-YEAR CERTIFICATE BOOKKEEPING

2004

#### 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 students seeking a one-year certificate.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ACC132	Financial Accounting*	4	pre-co-BUS124
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency)
		17	
Second Semester			
ACC130	Business Law and Ethics	3	
ACC133	Managerial Accounting	4	ACC132
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)
COM121	Effective Speaking	3	
ACC131	Taxation I	<u>4</u>	ACC132
		17	
	TOTAL CREDITS	34	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.



## ONE-YEAR CERTIFICATE

### **ENROLLED AGENT**

The catalog in force is assigned to students based on the academic year they first applied to the college, and

changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

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2005



28.

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132	
ACC231	Taxation II	3	ACC131	
	Total	14		
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 and Ethics	3		
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
	Total	16		
	TOTAL CREDIT HOURS	30		

<sup>^</sup>Based upon SSC placement score.

Students completing this certificate may be eligible to also receive a Tax Preparer Career Enhancement Certificate (2017). The classes in this certificate also apply toward the completion of an Accounting – Tax Major Degree (2007).

To become an Enrolled Agent, students must pass an exam administered by the Internal Revenue Service.

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

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

## ONE-YEAR CERTIFICATE

**ENROLLED AGENT** 

2005

#### 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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ACC132	Financial Accounting*	4	pre-co-BUS124
AOT226	Spreadsheet - Microsoft Excel^	<u>3</u>	ITD100 or Proficiency
		11	
Second Semester			
ACC130	Business Law and Ethics	3	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
ACC131	Taxation I	<u>4</u>	pre-co-ACC132
		10	
Third Semester			
ACC231	Taxation II	3	ACC131
COM121	Effective Speaking	3	
ACC227	Payroll Accounting	<u>3</u>	pre-co-ACC121 <b>or</b> pre-co-ACC132
		9	•
	TOTAL CREDITS	30	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.



# ASSOCIATE OF APPLIED BUSINESS ACCOUNTING – TAX MAJOR

### **2024-25 Catalog**

Effective Summer 2024

2007



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	3	ACC221	
ACC223	Cost Accounting	4	ACC133	
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132	
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)	
ACC231	Taxation II	3	ACC131	
	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 and Ethics	3		
ACC225	Auditing♦	4	pre-co-ACC222	
or ACC237	or Forensic Accounting and Fraud Examination◆^	<b>or</b> 3	or IDS102 or Proficiency	
ACC237 AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
FIN220	Business Finance	3	ACC133	
MTH124	Statistics^	3		
or MTH125	<b>or</b> College Algebra^	<b>or</b> 4	Check for prerequisites	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	31-33		
	TOTAL CREDIT HOURS	63-65		

<sup>^</sup>Based upon SSC placement score.

Students completing this degree may be eligible to also receive an Enrolled Agent Certificate (2005) and a Tax Preparer Career Enhancement Certificate (2017).

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

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>♦</sup>Course should be chosen following consultation with academic advisor.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

### **ACCOUNTING - TAX MAJOR**

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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ACC130	Business Law and Ethics	3	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ACC132	Financial Accounting*	4	pre-co-BUS124
AOT226	Spreadsheet - Microsoft Excel^	<u>3</u>	ITD100 or Proficiency
		17	
Second Semeste	<u>er</u>		
Arts & Humani	ties Elective <sup>1</sup>	3	Check for prerequisites
MTH124	Statistics^	3	
or	or	or	Check for prerequisites
MTH125	College Algebra^	4	mma (ACC121 on ACC122) and
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b>
	, c		pre-co-ACC132
ACC131	Taxation I	<u>4</u>	ACC132
		16-17	
Third Semester			
COM121	Effective Speaking	3	
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
BUS221	Microeconomics^	3	IDS102 or Proficiency
ACC231	Taxation II	<u>3</u>	ACC131
		17	
Fourth Semeste	<u>r</u>		
ACC222	Intermediate Accounting II	3	ACC221
ACC223	Cost Accounting	4	ACC133
ACC225	Auditing♦	4	pre-co-ACC222
or	or	or	or
ACC237	Forensic Accounting and Fraud Examination	3	IDS102 or Proficiency
FIN220	Business Finance	<u>3</u>	ACC133
	TOTAL CONDUCTO	13-14	
	TOTAL CREDITS	63-65	

<sup>^</sup>Based upon SSC placement score.

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

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>♦</sup>Course should be chosen following consultation with academic advisor.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



# ACCOUNTING - COMPUTER INFORMATION MAJOR

**2024-25 Catalog** 

Effective Summer 2024

2008



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
TECHNICAL ELI	ECTIVE I: Choose one (1) course		·	
ACC227	Payroll Accounting	3	pre-co-ACC121 or pre-co-ACC132	
ACC231	Taxation II	3	ACC131	
	ECTIVE II: Choose two (2) courses			
CIS125	Data Analysis and Decision Making ▲-	3	CPD121	
CIS221	Generating Reports for Decision Making ▲-	3	CPD121	
CPD123	Structured Query Language	3	CPD121	
WDD121	Internet/Intranet Design and Development^	3	(IDS102 or Proficiency) and (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	
ACC130	Business Law and Ethics	3	·	
ACC237	Forensic Accounting and Fraud Examination^	3	IDS102 or Proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	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	Co-ENG024 or Co-ENG011 or Proficiency	
ITD102	Computer Applications – Word^	1	ITD100 or Proficiency	
ITD104	Computer Applications – PowerPoint^	1	ITD100 or Proficiency	
ITD106	Computer Applications – Access^	1	ITD100 or Proficiency	
MTH124	Statistics^	3	-	
or	or	or	Check for prerequisites	
MTH125	College Algebra^	4	_	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	31-32		
	TOTAL CREDIT HOURS	62-63		

See back page for footnotes.

Students completing this degree may be eligible to also receive a Bookkeeping Certificate (2004), Computer-Integrated Accounting Certificate (2012) and a QuickBooks/Payroll Career Enhancement Certificate (2018)

### **ACCOUNTING - COMPUTER INFORMATION MAJOR**

2008

#### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
LNG124	conege composition	3	Proficiency
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or
BUS124	Business Analysis	3	proficiency) and (1DS102 or proficiency)
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
ACC130	Business Law and Ethics	<u>3</u>	
		13	
Second Semester			
ACC132	Financial Accounting*	4	pre-co-BUS124
COM121	Effective Speaking	3	
MTH124	Statistics^	3	Ch 1. f i - i
or MTH125	<b>or</b> College Algebra^	<b>or</b> 4	Check for prerequisites
ITD102	Computer Applications – Word^	1	ITD100 or Proficiency
ITD104	Computer Applications – PowerPoint^	1	ITD100 or Proficiency
ITD106	Computer Applications – Access^	1	ITD100 or Proficiency
Arts and Humanii		<u>3</u>	Check for prerequisites
		16-17	
Third Semester			
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
ACC131	Taxation I	4	ACC132 (IDS102 or Proficiency) and
CPD121	Data Modeling and Database Design^	3	(ITD100 or Proficiency)
Technical Electiv	e II <sup>3</sup>	<u>3</u>	Check for prerequisites
		18	encenjer prerequisites
Fourth Semester			
ACC237	Forensic Accounting and Fraud	3	IDS102 or Proficiency
BUS221	Examination^ Microeconomics^	3	IDS102 or Proficiency
			pre-(ACC121 or ACC132) and
ACC229	Accounting Software and Analytics	3	pre-co-(AOT226 or ITD122)
Technical Elective	$eI^2$	3	Check for prerequisites
Technical Elective	e II ³	<u>3</u>	Check for prerequisites
		15	
	TOTAL CREDITS	62-63	

<sup>^</sup>Based upon SSC placement score.

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

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>▲-</sup> Fall only course. Please see your academic advisor for availability.

<sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

<sup>&</sup>lt;sup>2</sup> Technical Elective I: ACC227, ACC231

<sup>&</sup>lt;sup>3</sup> Technical Elective II: CIS125, CIS221, CPD123, WDD121



### **ACCOUNTING SERVICES FOR HEALTH ADMINISTRATION MAJOR**

**2024-25 Catalog** Effective Summer 2024

2009



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	3	ACC221	
ACC223	Cost Accounting	4	ACC133	
ACC232	Governmental and Not-for-Profit Accounting	3	ACC221	
ACC237	Forensic Accounting and Fraud Examination^	3	IDS102 or Proficiency	
MAT231	Reimbursement for Health Care Services+++	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	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
BIO125	Medical Terminology+++	3		
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co- ENG011 or Proficiency	
FIN220	Business Finance	3	ACC133	
HIT230	Health Care Delivery in the U.S.+++	2		
HIT123	Healthcare Legal and Ethical Issues+++	2	pre-co-HIT230 or co-HIT121	
MTH124	Statistics^	3		
or MTH125	or College Algebra^	<b>or</b> 4	Check for prerequisites	
WITHIES	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	32-33		
	TOTAL CREDIT HOURS	64-65		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>+++</sup>Students must take Health courses in the sequence as shown.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

# ACCOUNTING SERVICES FOR HEALTH ADMINISTRATION MAJOR

2009

#### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011
21.012.	condge composition		or Proficiency
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or
DOS124	Business Anarysis	3	proficiency)
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
BIO125	Medical Terminology+++	3	•
COM121	Effective Speaking	<u>3</u>	
		16	
Second Semester			
ACC132	Financial Accounting*	4	pre-co-BUS124
HIT230	Health Care Delivery in the U.S.+++	2	
MTH124	Statistics^	3	
or	or	or	Check for prerequisites
MTH125	College Algebra^	4	TDG102 D G :
BUS221	Microeconomics^	3	IDS102 or Proficiency
Arts & Humanitie	s Elective <sup>1</sup>	3	Check for prerequisites
		15-16	
Third Semester			
ACC131	Taxation I	4	ACC132
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
HIT123	Healthcare Legal and Ethical Issues+++	2	pre-co-HIT230
MAT231	Reimbursement for Health Care Services+++	2	or co-HIT121
MA1231	Reimbursement for Health Care Services+++	<u>3</u> 17	
Equath Comparton		17	
Fourth Semester	Ei- Ai	2	IDC102 P - C -
ACC237	Forensic Accounting and Fraud Examination	3	IDS102 or Proficiency
ACC223	Cost Accounting	4	ACC133
ACC222	Intermediate Accounting II	3	ACC221
FIN220	Business Finance	3	ACC133
ACC232	Governmental and Not-For-Profit Accounting	<u>3</u>	ACC221
		16	
	TOTAL CREDITS	64-65	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>+++</sup>Students must take Health courses in the sequence as shown.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



# ONE-YEAR CERTIFICATE BANKING ASSOCIATE

**2024-25 Catalog** 

Effective Summer 2024

2010



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting*	4	pre-co-BUS124	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
FIN110	Personal Finance	2		
FIN221	Investment and Securities	3	ACC132	
FIN227	Money and Banking	3	pre-co-BUS221	
MKT121	Principles of Marketing	3	BUS221	
	Total	18		
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 and Ethics	3		
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
	Total	16		
	TOTAL CREDIT HOURS	34		

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Finance Degree (2400).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

### ONE-YEAR CERTIFICATE

**BANKING ASSOCIATE** 

2010

#### 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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ACC130	Business Law and Ethics	3	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ACC132	Financial Accounting*	4	pre-co-BUS124
BUS221	Microeconomics^	3	IDS102 or Proficiency
AOT226	Spreadsheet - Microsoft Excel^	<u>3</u>	ITD100 or Proficiency
		17	
Second Semester			
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
FIN110	Personal Finance	2	,
MKT121	Principles of Marketing	3	BUS221
COM121	Effective Speaking	3	
FIN221	Investment and Securities	3	ACC132
FIN227	Money and Banking	<u>3</u>	pre-co-BUS221
		17	
	TOTAL CREDITS	34	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.



# ACCOUNTING – FORENSIC ACCOUNTING MAJOR

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

2011

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Effective Summer 2024

MY ACADEMIC PLAN

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC221	Intermediate Accounting I	4	ACC132	
ACC222	Intermediate Accounting II	3	ACC221	
ACC237	Forensic Accounting and Fraud Examination^	3	IDS102 or Proficiency	
ACC238	Financial Statement Analysis	3	ACC133	
CFS137	Computer Crime and Investigation	3	NET120	
FIN221	Investment and Securities	3	ACC132	
	Total	31		
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 and Ethics	3		
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
CFS175	White Collar Crime	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH124	Statistics^	3		
or MTH125	<b>or</b> College Algebra^	or 4	Check for prerequisites	
NET120	PC Upgrading and Maintenance	3		
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	31-32		
	TOTAL CREDIT HOURS	62-63		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

# ACCOUNTING – FORENSIC ACCOUNTING MAJOR

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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ACC132	Financial Accounting*	4	pre-co-BUS124
AOT226	Spreadsheet - Microsoft Excel <sup>^</sup>	<u>3</u>	ITD100 or Proficiency
		14	
Second Semester			
BUS221	Microeconomics^	3	IDS102 or Proficiency
COM121	Effective Speaking	3	
FIN221	Investment and Securities	3	ACC132
NET120	PC Upgrading and Maintenance	3	
ACC130	Business Law and Ethics	3	
MTH124	Statistics^	3	
or MTH125	<b>or</b> College Algebra^	or 4	Check for prerequisites
W1111123		18-19	
Third Semester			
ACC221	Intermediate Accounting I	4	ACC132
ACC133	Managerial Accounting	4	ACC132
ACC131	Taxation I	4	ACC132
CFS175	White Collar Crime	<u>3</u>	
		15	
Fourth Semester			
ACC222	Intermediate Accounting II	3	ACC221
ACC237	Forensic Accounting and Fraud Examination^	3	IDS102 or Proficiency
ACC238	Financial Statement Analysis	3	ACC133
CFS137	Computer Crime and Investigation	3	NET120
Arts & Humanitie		<u>3</u>	Check for prerequisites
		15	-
	TOTAL CREDITS	62-63	

<sup>^</sup>Based upon SSC placement score

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



## ONE-YEAR CERTIFICATE

### **COMPUTER-INTEGRATED ACCOUNTING**

The catalog in force is assigned to students based on the academic year they first applied to the college, and

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2012



changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132	
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)	
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or Proficiency	
	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 and Ethics	3		
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD102	Computer Applications – Word^	1	ITD100 or Proficiency	
ITD104	Computer Applications – PowerPoint^	1	ITD100 or Proficiency	
ITD106	Computer Applications – Access^	1	ITD100 or Proficiency	
	Total	16		
	TOTAL CREDIT HOURS	33		

<sup>^</sup>Based upon SSC placement score

Students completing this certificate may be eligible to also receive a QuickBooks/Payroll Career Enhancement Certificate (2018). The classes in this certificate also apply toward the completion of an Accounting – Computer Information Major Degree (2008).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

# ONE-YEAR CERTIFICATE COMPUTER-INTEGRATED ACCOUNTING

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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ACC130	Business Law and Ethics	3	
ACC132	Financial Accounting*	4	pre-co-BUS124
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or proficiency
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
		17	
Second Semester			
ITD102	Computer Applications – Word^	1	ITD100 or proficiency
ITD104	Computer Applications – PowerPoint^	1	ITD100 or proficiency
ITD106	Computer Applications – Access^	1	ITD100 or proficiency
ACC133	Managerial Accounting	4	ACC132
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)
COM121	Effective Speaking	<u>3</u>	
		16	
	TOTAL CREDITS	33	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.



#### **BUSINESS MANAGEMENT**

**2024-25 Catalog** Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BUS121	Business Administration^	3	IDS102 or Proficiency	
MGT121	Principles of Management	3	BUS121 or ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	MGT121 and (ACC128 or ACC133)	
MGT224	Human Resource Management	3	MGT121	
MGT227	Operations Management	4	MGT121 <b>and</b> (MTH118 or MTH124 or MTH125)	
MKT121	Principles of Marketing	3	BUS221	
TECHNICAL EL	ECTIVES: Choose three (3) courses			
MGT222	Small Business Management	3	(ACC128 or ACC133) and MGT121	
MGT232	International Business	3	BUS121	
MKT221	Sales	3	MKT121	
MKT226	Supply Chain Management	3	MKT121	
	Total	32		
NON-TECH	C TIN	G 114	B 16 B 14	Completed
Course Number	Course Title	Credits	Pre- and Co-Requisites	Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
ACC128	Accounting Basics for Managers*	4	(MTH118 or MTH124 or MTH125) and (IDS102 or proficiency)	
ACC130	Business Law and Ethics	3	1 2/	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
FIN110	Personal Finance	2		
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency	
or	or	or	or	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or		
MTH124	Statistics Ω	3	Check for prerequisites	
0r	or	or		
MTH125	College Algebra Ω	4		
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	31-32		
	TOTAL CREDIT HOURS	63-64		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122

<sup>\*</sup>Students may take both ACC132 and ACC133 in lieu of ACC128, but ACC128 does NOT take the place of either ACC132 or ACC133.

**BUSINESS MANAGEMENT** 

2055

#### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS121	Business Administration^	3	IDS102 or Proficiency
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency
or	or	or	or
AOT226 FIN110	Spreadsheet - Microsoft Excel^ Personal Finance	3 2	ITD100 or Proficiency
ENG124	College Composition <sup>^</sup>	3	Co-ENG024 or Co-ENG011 or
ENGIZI	conege composition	3	Proficiency
MTH118	Quantitative Reasoning^	3	•
or MTH124	or Statistics Ω	or 2	Chash fan managuigitag
0r	or	3 <b>or</b>	Check for prerequisites
MTH125	College Algebra Ω	<u>4</u>	
		15-16	
Second Semester			
ACC130	Business Law and Ethics	3	
MGT121	Principles of Management	3	BUS121 or ENT120
BUS221	Microeconomics^	3	IDS102 or Proficiency
ACC128	Accounting Basics for Managers*	4	(MTH118 or MTH124 or MTH125) <b>and</b> (IDS102 or proficiency)
COM121	Effective Speaking	<u>3</u>	(====;)
		16	
Third Semester			
MKT121	Principles of Marketing	3	BUS221
MGT227	Operations Management	4	MGT121 <b>and</b> (MTH118 or MTH124 or MTH125)
MGT221	Supervision	3	MGT121
Technical Elective <sup>2</sup>		3	Check for prerequisites
Technical Elective <sup>2</sup>		<u>3</u>	Check for prerequisites
		16	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
BUS222	Macroeconomics^	3	IDS102 or Proficiency
MGT223	Business Decision Making	4	MGT121 and (ACC128 or ACC133)
Arts & Humanities I	Elective <sup>1</sup>	3	Check for prerequisites
Technical Elective <sup>2</sup>		<u>3</u>	Check for prerequisites
		16	
	TOTAL CREDITS	63-64	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup> Technical Electives: MGT222, MGT232, MKT221, MKT226

<sup>\*</sup>Students may take both ACC132 and ACC133 in lieu of ACC128, but ACC128 does NOT take the place of either ACC132 or ACC133.



### **BUSINESS MANAGEMENT – HEALTH SERVICES MAJOR**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC130	Business Law and Ethics	3		
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 or Proficiency	
BIO125	Medical Terminology	3		
BUS121	Business Administration^	3	IDS102 or Proficiency	
HIT230	Health Care Delivery in the U.S.	2		
MAT231	Reimbursement for Health Care Services	3		
MGT121	Principles of Management	3	BUS121 or ENT120	
MGT223	Business Decision Making	4	(ACC133 or ACC128) and MGT121	
MGT224	Human Resource Management	3	MGT121	
MKT121	Principles of Marketing	3	BUS221	
	Total	30		
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	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency	
or	or	or	or	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or		
MTH124	Statistics Ω	3	Check for prerequisites	
or	or	or		
MTH125	College Algebra Ω	4		
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	33-34		
	TOTAL CREDIT HOURS	63-64		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution. 

<sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122

# BUSINESS MANAGEMENT – HEALTH SERVICES MAJOR

2060

#### 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

<u>First Semester</u>	Credit Hours	Pre- and Co-requisites
SSC101 Student Success Seminar^^	1	Take first semester
BUS121 Business Administration^	3	IDS102 or Proficiency
ITD122 Computer Applications for Professionals^■	3	ITD100 or Proficiency
or or	or	or
AOT226 Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
BUS124 Business Analysis^	3	(MTH022 or MTH023 or
		proficiency) and (IDS102 or
ENGIA CHI CO WA	2	proficiency)
ENG124 College Composition^	3	Co-ENG024 or Co-ENG011 or
BIO125 Medical Terminology	2	Proficiency
Medical Terminology	<u>3</u> 16	
Consul Compartor	10	
Second Semester  MTH118 Quantitative Reasoning^	3	
MTH118 Quantitative Reasoning^ or or	or	
MTH124 Statistics $\Omega$	3	Check for prerequisites
or or	or	Check for prerequisites
MTH125 College Algebra $\Omega$	<u>4</u>	
MGT121 Principles of Management	3	BUS121 or ENT120
BUS221 Microeconomics^	3	IDS102 or Proficiency
COM121 Effective Speaking	3	•
ACC132 Financial Accounting*	<u>4</u>	pre-co-BUS124
č	<u>-</u> 16	1
Third Semester		
MKT121 Principles of Marketing	3	BUS221
BIO101 Introduction to Anatomy and Physiology^	3	IDS102 or Proficiency
ACC130 Business Law and Ethics	3	•
ACC133 Managerial Accounting	4	ACC132
HIT230 Health Care Delivery in the U.S.	<u>2</u>	
•	<u>-</u> 15-16	
Fourth Semester		
MGT224 Human Resource Management	3	MGT121
BUS222 Macroeconomics^	3	IDS102 or Proficiency
MGT223 Business Decision Making	4	ACC133 and MGT121
MAT231 Reimbursement for Health Care Services	3	
Arts & Humanities Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
	<u>-</u> 16	- · · · · · · · · · · · · · · · · · · ·
TOTAL CREDITS	63-64	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD12

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122



# BUSINESS MANAGEMENT – FINANCE MAJOR

**2024-25 Catalog** 

Effective Summer 2024

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MY ACADEMIC PLAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC130	Business Law and Ethics	3		
BUS121	Business Administration^	3	IDS102 or Proficiency	
FIN220	Business Finance	3	ACC133	
FIN221	Investment and Securities ▲	3	ACC132	
FIN227	Money and Banking ▲	3	Pre-Co-BUS221	
MGT121	Principles of Management	3	BUS121 or ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	MGT121 and (ACC128 or ACC133)	
MGT224	Human Resource Management	3	MGT121	
MKT121	Principles of Marketing	3	BUS221	
	Total	31		
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	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3	Ĭ	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency	
or	or	or	or	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or		
MTH124	Statistics Ω	3	Check for prerequisites	
or	or	or		
MTH125	College Algebra Ω	4		
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	33-34		
	TOTAL CREDIT HOURS	64-65		

<sup>^</sup>Based upon SSC placement score

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS121	Business Administration^	3	IDS102 or Proficiency
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency
or AOT226	<b>or</b> Spreadsheet - Microsoft Excel^	<b>or</b> 3	<b>or</b> ITD100 <b>or</b> Proficiency
A01220	Spreadsheet - Wherosoft Excer	3	(MTH022 or MTH023 or
BUS124	Business Analysis^	3	proficiency) and (IDS102 or
			proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MTH118	Quantitative Reasoning^	3	Troncioncy
or	or	or	
MTH124	Statistics $\Omega$	3	Check for prerequisites
or MTH125	<b>or</b> College Algebra Ω	or <u>4</u>	
W1111123	Conege / Ngcora sz	16-17	
Second Semester			
ACC130	Business Law and Ethics	3	
MGT121	Principles of Management	3	BUS121 or ENT120
BUS221	Microeconomics^	3	IDS102 or Proficiency
ACC132	Financial Accounting*	4	pre-co-BUS124
COM121	Effective Speaking	<u>3</u>	-
		16	
Third Semester			
MGT221	Supervision	3	MGT121
MKT121	Principles of Marketing	3	BUS221
FIN227	Money and Banking ▲	3	Pre-Co-BUS1221
ACC133	Managerial Accounting	4	ACC132
FIN221	Investments and Securities ▲	<u>3</u>	ACC132
		16	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
BUS222	Macroeconomics^	3	IDS102 or Proficiency
MGT223	Business Decision Making	4	MGT121 and (ACC128 or ACC133)
FIN220	Business Finance	3	ACC133
Arts & Humanities Elective <sup>1</sup>		<u>3</u>	Check for prerequisites
		16	V 1
	TOTAL CREDITS	64-65	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122



# BUSINESS MANAGEMENT – HUMAN RESOURCES MAJOR

**2024-25 Catalog** 

Effective Summer 2024

2062



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BUS121	Business Administration^	3	IDS102 or Proficiency	
MGT121	Principles of Management	3	BUS121 or ENT120	
MGT221	Supervision	3	MGT121	
MGT223	Business Decision Making	4	MGT121 and	
			(ACC128 or ACC133)	
MGT224	Human Resource Management	3	MGT121	
MGT232	International Business	3	BUS121	
MGT237	Safety and Health Management	3	MGT224	
MGT238	Strategic Staffing	3	MGT224	
MGT239	Compensation and Benefits	3	MGT224	
MKT121	Principles of Marketing	3	BUS221	
	Total	31		
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 and Ethics	3		
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3	,	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or		
MTH124	Statistics Ω	3	Check for prerequisites	
or	or	or	Check for prerequisites	
MTH125	College Algebra Ω	4		
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
or	or	or	or	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	33-34		
	TOTAL CREDIT HOURS	64-65		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122

# BUSINESS MANAGEMENT – HUMAN RESOURCES MAJOR

2062

#### 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

ish in two years.			
<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS121	Business Administration^	3	IDS102 or Proficiency
ITD122	Computer Applications for Professionals <sup>^</sup> ■	3	ITD100 or Proficiency
or	or	or	or
AOT226	Spreadsheet - Microsoft Excel <sup>^</sup>	3	ITD100 or Proficiency
BUS124	Business Analysis^	3	(MTH022 or MTH023 or
			proficiency) and (IDS102 or
ENICARA		•	proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
4 . 0 . 11	w El a l	2	Proficiency
Arts & Humanities Elective <sup>1</sup>		<u>3</u>	Check for prerequisites
g 1g		16	
Second Semest		2	
MTH118	Quantitative Reasoning^	3	
0r	or Statistics Ω	or	Cl 1. f
MTH124		3	Check for prerequisites
or MTH125	Or Callege Algebra O	or	
MTH123 MGT121	College Algebra Ω Principles of Management	<u>4</u> 3	BUS121 or ENT120
BUS221	Microeconomics <sup>^</sup>	3	IDS102 or Proficiency
MGT232	International Business	3	BUS121
ACC132	Financial Accounting*	<u>4</u>	pre-co-BUS124
ACC132	I mancial Accounting	16-17	pre-co-BO3124
Third Semester		10-17	
MKT121	Principles of Marketing	3	BUS221
ACC130	Business Law and Ethics	3	B00221
ACC133	Managerial Accounting	4	ACC132
MGT224	Human Resource Management	3	MGT121
COM121	Effective Speaking	3	
	1 6	16	
Fourth Semeste	er		
MGT221	Supervision	3	MGT121
MGT223	Business Decision Making	4	MGT121 and
	-		(ACC128 or ACC133)
MGT237	Safety and Health Management	3	MGT224
MGT238	Strategic Staffing	3	MGT224
MGT239	Compensation and Benefits	3 16	MGT224
	TOTAL CREDITS	64-65	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122



### ASSOCIATE OF APPLIED BUSINESS

**2024-25 Catalog** 

Effective Summer 2024

2067

# BUSINESS MANAGEMENT – KENT STATE UNIVERSITY BBA DEGREE MAJOR

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Numbers					Completed
KSU Equivalent	Stark State	Course Title	Credits	Pre- or Co-Requisites	Sem./Year
FIN 26074	ACC130	Business Law and Ethics	3		
BUS 10123	BUS121	Business Administration^	3	IDS102 or Proficiency	
ECON 22060 (KSS)	BUS221	Microeconomics^	3	IDS102 or Proficiency	
ECON 22061 (KSS)	BUS222	Macroeconomics^	3	IDS102 or Proficiency	
MGMT 24163*	MGT121	Principles of Management	3	BUS121 or ENT120	
General Elective	MGT221	Supervision	3	MGT121	
General Elective	MGT223	Business Decision Making	4	MGT121 and (ACC128 or ACC133)	
General Elective	MGT224	Human Resource Management	3	MGT121	
General Elective	MGT227	Operations Management	4	MGT121 and (MTH118 or MTH124 or MTH125)	
MKTG 25010	MKT121	Principles of Marketing	3	BUS221	
		Total	32		
NON-TECH Course Number		Course Title	C di4-	Don Co Don't don	Completed
KSU Equivalent	Stark State	Course Title	Credits	Pre- or Co-Requisites	Sem./Year
General Elective	SSC101	Student Success Seminar^^	1	Take first semester	
ACCT 23020	ACC132	Financial Accounting◆	4	pre-co-BUS124	
ACCT 23021	ACC133	Managerial Accounting	4	ACC132	
General Elective	BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
COMM 15000* (KADL)	COM121	Effective Speaking	3		
ENG 11011 (KCP1)	ENG124	College Composition^	3	Co-ENG024 or Co- ENG011 or Proficiency	
HIST 12070 (KHUM, DIVD)	HIS121	US History I to 1877	3		
or HIST 12071 (KHUM, DIVD)	or HIS122	or US History II from 1877	or 3		
CIS 24053	ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency	
MATH 11010 (KMCR) (3 credit hours)*	MTH125	College Algebra^	4	MTH023 <b>or</b> Pre-Co- MTH025 <b>or</b> Proficiency	
PSYC 11762 (KSS, DIVD)	PSY121	General Psychology^	3	IDS102 or Proficiency	
		Total	31		
		TOTAL CREDIT HOURS	63		

<sup>^</sup>Based upon SSC placement score.

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

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

<sup>◆</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>\*</sup>Must earn minimum C (2.000) grade

### **2024-25 Catalog**

Effective Summer 2024

## BUSINESS MANAGEMENT – KENT STATE UNIVERSITY BBA DEGREE MAJOR

2067

### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS121	Business Administration^	3	IDS102 or Proficiency
ITD122	Computer Applications for Professionals <sup>^</sup> ■	3	ITD100 or Proficiency
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or
	·		proficiency)
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
		13	•
Second Semester			
ACC132	Financial Accounting♦	4	pre-co-BUS124
COM121	Effective Speaking	3	
MGT121	Principles of Management	3	BUS121 or ENT120
BUS221	Microeconomics^	3	IDS102 or Proficiency
MTH125	College Algebra^	<u>4</u>	MTH023 <b>or</b> Pre-Co-MTH025 <b>or</b> Proficiency
		17	J
Third Semester			
MGT221	Supervision	3	MGT121
MKT121	Principles of Marketing	3	BUS221
MGT227	Operations Management	4	MGT121 <b>and</b> (MTH118 or MTH124 or MTH125)
ACC133	Managerial Accounting	4	ACC132
ACC130	Business Law and Ethics	<u>3</u>	1100132
1100100	Z womess Zwii waa Zimes	17	
Fourth Semester			
MGT224	Human Resource Management	3	MGT121
BUS222	Macroeconomics^	3	IDS102 or Proficiency
MGT223	Business Decision Making	4	MGT121 and
	•		(ACC128 or ACC133)
HIS121	US History I to 1877	3	
0r	or	or	
HIS122	US History II from 1877	3	1DC103 D C :
PSY121	General Psychology <sup>^</sup>	<u>3</u>	IDS102 or Proficiency
	TOTAL CREDITS	16	
	TOTAL CREDITS	63	

<sup>^</sup>Based upon SSC placement score.

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

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

<sup>♦</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

## BUSINESS MANAGEMENT – KENT STATE UNIVERSITY BBA DEGREE MAJOR

2067

ADDITIONAL COURSES FOR KENT BBA DEGREE AVAILABLE
AT STARK STATE COLLEGE AND ACCEPTED AT KENT STATE UNIVERSITY:

ADDITIONAL BRIDGE COURSES:						
KSU Equivalent	Stark State	Course Title	Credits	Pre- or Co-requisites	Completed Sem./Year	
ENG 21011 (KCP2)*	ENG231	College Composition II*	3	ENG124		
MATH 10041 (KMCR) (Substitute for BA 24056)	MTH124	Statistics	3	Pre-Co-MTH024 or MTH022 or Proficiency		
MATH 12002 (KCMR)	MTH223	Analytic Geometry and Calculus	4	MTH135 or (MTH125 and MTH130) or Proficiency		
PHIL 21001 (KHUM, DIVG)	PHL122	Ethics	3			

### TWO ADDITIONAL BRIDGE SCIENCE COURSES: 6 credit hours minimum

(3 credit hour minimum must involve lab course indicated by \*)

(5 create nour minimum must involve tab course indicated by					
KSU Equivalent	Stark State	Course Title	Credits	Pre- or Co-requisites	Completed Sem./Year
Kent Core Basic Science (KBS)	Any OTM Natural and Physical Science	Varies	3	Varies	
Kent Core Basic Science with Laboratory (KBS, KLAB)	Any OTM Natural and Physical Science with a Lab	Varies	3-4	Varies	

If all Bridge courses are completed at Stark State College, these 49 credit hours must be taken at Kent State University to obtain the BBA degree:

obtain the DDA degree.			
Course Number	Course Title	Credit Hours	
MGMT 34165* or MGMT 34175*	Dynamics of Leadership or Learning to Lead	3	
HRM 34180*	Human Resource Management	3	
MGMT 34185*	Individual and Group Behavior in Organizations	3	
BA 44152*	Project Management	3	
MGMT 44163*	Global Business Management (WIC)*	3	
MGMT 44392*	Business Consulting and Practicum (ELR)	3	
Major Electives*		6	
College Electives		6	
BUS 30062	Advanced Professional Development	3	
FIN 36053	Business Finance	3	
BA 34060	Operations Management	3	
BA 34156	Business Analytics II	3	
MGMT 44285	Integrated Business Policy & Strategy	3	
UC 10162	Introduction to Professional Development	1	
Kent Core Fine Arts (KFA)		3	
	TOTAL CREDIT HOURS	49	

<sup>\*</sup>Minimum C (2.000) grade required.

Kent State University has institutional honors based on the completion of at least 60 credit hours earned at Kent State. Anything less than 60 credit hours will not be recognized with honors. This means if students who transfer would like to be recognized for cum laude, magna cum laude or summa cum laude, they need to have earned 60 credit hours at Kent State by the semester before they are graduating in order for them to be recognized in the commencement book as receiving honors and in order to receive honors cords.

#### Progression Requirements:

- o Minimum 2.0 overall GPA
- o Minimum C grade in COMM 15000, ENG 21011, MATH 11010 and MGMT 24163 and all major requirements

#### Graduation Requirements:

- o Minimum 2.0 Major GPA
- o Minimum 2.0 Overall GPA
- Students must complete at least 50 percent of business credit hours (required for the business degree) in-residence on a Kent State University campus.
- Students must complete two measures of outcomes assessment as specified by the College of Business Administration for complete satisfaction of the B.B.A.
- Minimum 120 total credit hours to graduate. Number of general electives depends on number of credit hours needed to reach 120 total credit hours.

KSU bridge courses revised: 7-12-2023



### ASSOCIATE OF APPLIED BUSINESS

## \_

2024-25 Catalog

Effective Summer 2024

2079

## BUSINESS MANAGEMENT – ENTREPRENEURSHIP MAJOR

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC130	Business Law and Ethics	3		
BUS121	Business Administration^	3	IDS102 or Proficiency	
ENT120	Entrepreneurship^	3	IDS102 or Proficiency	
ENT124	Managing Entrepreneurial Growth	3	ENT120	
ENT223	Entrepreneurship Practicum	3	Sophomore standing <b>or</b> Department Chair approval	
ENT225	Global Entrepreneurship	3	ENT120	
MGT121	Principles of Management	3	BUS121 or ENT120	
MGT224	Human Resource Management	3	MGT121	
MKT121	Principles of Marketing	3	BUS221	
MKT221	Sales	3	MKT121	
	Total	30		
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	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency	
or	or	or	or	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or		
MTH124	Statistics Ω	3	Check for prerequisites	
or	or	or		
MTH125	College Algebra Ω	4		
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	33-34		
	TOTAL CREDIT HOURS	63-64		

<sup>^</sup>Based upon SSC placement score

Students completing this degree may be eligible to also receive an Entrepreneurship One-Year Certificate (2071) and an Entrepreneurship Career Enhancement Certificate (2072).

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122

## BUSINESS MANAGEMENT – ENTREPRENEURSHIP MAJOR

2079

### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS121	Business Administration^	3	IDS102 or Proficiency
ITD122	Computer Applications for Professionals <sup>^</sup> ■	3	ITD100 or Proficiency
or	or	or	or
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency)  And (IDS102 or proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
ENT120	Entrepreneurship^	<u>3</u>	IDS102 or Proficiency
	-	16	•
Second Semester			
ENT124	Managing Entrepreneurial Growth	3	ENT120
BUS221	Microeconomics^	3	IDS102 or Proficiency
MTH118	Quantitative Reasoning^	3	
or	or	or	
MTH124	Statistics $\Omega$	3	Check for prerequisites
or	or	or	
MTH125	College Algebra $\Omega$	4	
MGT121	Principles of Management	3	BUS121 or ENT120
ENT225	Global Entrepreneurship	<u>3</u>	ENT120
		15-16	
Third Semester			
MGT224	Human Resource Management	3	MGT121
COM121	Effective Speaking	3	
MKT121	Principles of Marketing	3	BUS221
ACC132	Financial Accounting*	4	pre-co-BUS124
Arts & Humanities	s Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		16	
Fourth Semester			
ENT223	Entrepreneurship Practicum	3	Sophomore Standing <b>or</b> Department Chair Approval
ACC133	Managerial Accounting	4	ACC132
ACC130	Business Law and Ethics	3	
BUS222	Macroeconomics^	3	IDS102 or Proficiency
MKT221	Sales	<u>3</u> 16	MKT121
		16	
		63-64	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122



## ONE-YEAR CERTIFICATE

### **ENTREPRENEURSHIP**

2024-25 Catalog
Effective Summer 2024

2071



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BUS121	Business Administration^	3	IDS102 or Proficiency	
ENT120	Entrepreneurship^	3	IDS102 or Proficiency	
ENT124	Managing Entrepreneurial Growth	3	ENT120	
ENT225	Global Entrepreneurship	3	ENT120	
MGT121	Principles of Management	3	BUS121 or ENT120	
	Total	15		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS124	Business Analysis ^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency	
or AOT226	<b>or</b> Microsoft - Spreadsheet Excel^	or 3	ITD100 or Proficiency	
_	Total	16		
	TOTAL CREDIT HOURS	31		

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Business Management - Entrepreneurial Major (2079).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122.

## ONE-YEAR CERTIFICATE ENTREPRENEURSHIP

2071

### 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 students seeking a one-year certificate.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS121	Business Administration^	3	IDS102 or Proficiency
ENT120	Entrepreneurship^	3	IDS102 or Proficiency
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
COM121	Effective Speaking	3	
BUS124	Business Analysis^	<u>3</u>	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
		16	- · · · · · · · · · · · · · · · · · · ·
Second Semester			
BUS221	Microeconomics^	3	IDS102 or Proficiency
MGT121	Principles of Management	3	BUS121 or ENT120
ENT124	Managing Entrepreneurial Growth	3	ENT120
ENT225	Global Entrepreneurship	3	ENT120
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency
or	or	or	
AOT226	Microsoft - Spreadsheet Excel^	<u>3</u>	ITD100 or Proficiency
	•	15	·
	TOTAL CREDITS	31	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122



### ASSOCIATE OF APPLIED BUSINESS

### **MARKETING AND SALES MANAGEMENT**



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

2300

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Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC130	Business Law and Ethics	3		
BUS121	Business Administration^	3	IDS102 or Proficiency	
MGT121	Principles of Management	3	BUS121 or ENT120	
MKT121	Principles of Marketing	3	BUS221	
MKT221	Sales	3	MKT121	
MKT222	Advertising	3	MKT121	
MKT229	Market Planning	4	MKT121	
	ECTIVE: Choose three (3) courses			
MGT221	Supervision	3	MGT121	
MKT226	Supply Chain Management	3	MKT121	
MKT227	Consumer Behavior	3	MKT121	
MKT236	E-Marketing	3	MKT121	
	Total	31		
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	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency	
or	or	or	or	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or		
MTH124	Statistics Ω	3	Check for prerequisites	
or MTH125	or College Algebra Ω	or 4		
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	33-34		
	TOTAL CREDIT HOURS	64-65		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BUS121	Business Administration^	3	IDS102 or Proficiency
BUS124	Business Analysis^	3	(MTH022 or MTH023 or
			proficiency) and (IDS102 or
		_	proficiency)
BUS221	Microeconomics^	3	IDS102 or Proficiency
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
MTH1110	One did dies D	2	Proficiency
MTH118	Quantitative Reasoning^	3	
or MTH124	or Statistics Ω	or 3	Check for prerequisites
or	or	or	Check for prerequisites
MTH125	College Algebra Ω	<u>4</u>	
		16 <del>-</del> 17	
Second Semester	r		
MKT121	Principles of Marketing	3	BUS221
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency
or	or	or	or
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
ACC132	Financial Accounting*	4	pre-co-BUS124
COM121	Effective Speaking	3	
MGT121	Principles of Management	<u>3</u>	BUS121 or ENT120
		16	
Third Semester			
BUS222	Macroeconomics^	3	IDS102 or Proficiency
MKT221	Sales	3	MKT121
MKT222	Advertising	3	MKT121
ACC133	Managerial Accounting	4	ACC132
Technical Electiv	ve <sup>2</sup>	<u>3</u>	Check for prerequisites
		16	
Fourth Semester			
MKT229	Market Planning	4	MKT121
ACC130	Business Law and Ethics	3	
Technical Electiv	ve <sup>2</sup>	3	Check for prerequisites
Technical Electiv	ve <sup>2</sup>	3	Check for prerequisites
Arts & Humaniti	es Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		16	v 1 1
	TOTAL CREDITS	64-65	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH124 or MTH125 should only be taken by students planning to transfer to a four-year institution.

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG240, ENG241, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup> Technical Elective: MGT221, MKT226, MKT227, MKT236



### ASSOCIATE OF APPLIED BUSINESS **FINANCE**

The catalog in force is assigned to students based on the academic year they first applied to the college, and

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changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC133	Managerial Accounting	4	ACC132	
ACC231	Taxation II	3	ACC131	
ACC237	Forensic Accounting and Fraud Examination^	3	IDS102 or Proficiency	
ACC238	Financial Statement Analysis	3	ACC133	
FIN110	Personal Finance	2		
FIN220	Business Finance	3	ACC133	
FIN221	Investment and Securities	3	ACC132	
FIN227	Money and Banking	3	pre-co-BUS221	
	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 and Ethics	3		
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MKT121	Principles of Marketing	3	BUS221	
MTH124	Statistics^	3		
or MTH125	or College Algebra^	<b>or</b> 4	Check for prerequisites	
	Select one (1)Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	31-32		
	TOTAL CREDIT HOURS	63-64		

<sup>^</sup>Based upon SSC placement score

Students completing this degree may be eligible to also receive a Banking Associate Certificate (2010) and a Tax Preparer Career Enhancement Certificate (2017).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ACC130	Business Law and Ethics	3	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
FIN110	Personal Finance	2	
AOT226	Spreadsheet - Microsoft Excel^	3	ITD100 or Proficiency
BUS124	Business Analysis^	<u>3</u>	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
		15	proneieney)
Second Semester			
ACC132	Financial Accounting*	4	pre-co-BUS124
BUS221	Microeconomics^	3	IDS102 or Proficiency
COM121	Effective Speaking	3	
MTH124	Statistics^	3	
0r	<b>or</b> College Algebra^	<b>or</b> 4	Check for prerequisites
MTH125  Arts & Humanitie		<u>3</u>	Check for prerequisites
mis & manual	is Diceive	<u>-</u> 16-17	Check for prerequisites
Third Semester			
BUS222	Macroeconomics^	3	IDS102 or Proficiency
ACC133	Managerial Accounting	4	ACC132
ACC131	Taxation I	4	ACC132
FIN227	Money and Banking	3	pre-co-BUS221
FIN221	Investment and Securities	<u>3</u>	ACC132
		17	
Fourth Semester			
MKT121	Principles of Marketing	3	BUS221
ACC238	Financial Statement Analysis	3	ACC133
ACC231	Taxation II	3	ACC131
ACC237	Forensic Accounting and Fraud Examination^	3	IDS102 or Proficiency
FIN220	Business Finance	<u>3</u>	ACC133
		15	
	TOTAL CREDITS	63-64	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.

<sup>&</sup>lt;sup>1</sup> Arts & Humanities Elective: ENG233, ENG234, ENG235, ENG236, ENG237, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122



## CAREER ENHANCEMENT CERTIFICATE

### **TAX PREPARER**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

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2017

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC131	Taxation I	4	ACC132	
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC231	Taxation II	3	ACC131	
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 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
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ACC132	Financial Accounting*	<u>4</u>	pre-co-BUS124
		7	
Second Semeste	<u>r</u>		
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or proficiency
ACC131	Taxation I	<u>4</u>	ACC132
		7	
Third Semester			
ACC231	Taxation II	<u>3</u>	ACC131
		3	
	TOTAL CREDITS	17	
	TOTTLE CILLETIO	± '	

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of an Enrolled Agent Certificate (2005) and an Accounting – Tax Major Degree (2007).

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.



## CAREER ENHANCEMENT CERTIFICATE

### QUICKBOOKS/PAYROLL

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

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2018

Business, Engineering, and Information Technologies Division

Accounting and Finance Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ACC132	Financial Accounting*	4	pre-co-BUS124	
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132	
ACC229	Accounting Software and Analytics	3	pre-(ACC121 or ACC132) and pre-co-(AOT226 or ITD122)	
AOT226	Spreadsheet – Microsoft Excel^	3	ITD100 or proficiency	
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 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
BUS124	Business Analysis^	3	(MTH022 or MTH023 or proficiency) and (IDS102 or proficiency)
ACC132	Financial Accounting*	<u>4</u>	pre-co-BUS124
		7	
Second Semester			
AOT226	Spreadsheet – Microsoft Excel <sup>^</sup>	3	ITD100 or proficiency
ACC227	Payroll Accounting	3	pre-co-ACC121 <b>or</b> pre-co-ACC132
ACC229	Accounting Software and Analytics	<u>3</u>	pre-(ACC121 or ACC132) <b>and</b> pre-co-(AOT226 or ITD122)
		9	
	TOTAL CREDITS	16	

<sup>^</sup>Based upon SSC placement score.

The classes in this certificate also apply toward the completion of a Bookkeeping Certificate (2004), an Accounting – Corporate Major degree (2001) and Accounting - Computer-Information Major degree (2008).

To become a QuickBooks Certified User, students must pass an exam administered by Certiport.

To become a <u>Certified Payroll Professional</u> or achieve the <u>Fundamental Payroll Certification</u>, students must pass an exam administered by the American Payroll Association.

<sup>\*</sup>Student may elect to take ACC121 Introduction to Accounting prior to taking this course.



### CAREER ENHANCEMENT CERTIFICATE **ENTREPRENEURSHIP**

### **2024-25 Catalog** Effective Summer 2024

2072

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division

Management and Marketing Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BUS121	Business Administration^	3	IDS102 or Proficiency	
ENT120	Entrepreneurship^	3	IDS102 or Proficiency	
ENT124	Managing Entrepreneurial Growth	3	ENT120	
ENT225	Global Entrepreneurship	3	ENT120	
	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
ENT120	Entrepreneurship^	3	IDS102 or Proficiency
BUS121	Business Administration^	<u>3</u>	IDS102 or Proficiency
		6	
Second Semester			
ENT124	Managing Entrepreneurial Growth	3	ENT120
ENT225	Global Entrepreneurship	<u>3</u>	ENT120
		6	
	TOTAL CREDITS	12	

<sup>^</sup>Based upon SSC placement score.

The classes in this certificate also apply toward the completion of an Entrepreneurship One-Year Certificate and a Business Management -Entrepreneurial Major (2079).



### career community:

computer science, information technology, security and digital media

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. 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.



### ASSOCIATE OF APPLIED BUSINESS

### **COMPUTER TECHNOLOGY**

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ctive Summer 202

MY ACADEMIC PLAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

**5000** 

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS125	Data Analysis and Decision Making ▲	3	CPD121	
CIS221	Generating Reports for Decision Making ▲-	3	CPD121	
CIS222	Data Acquisition and Analysis ▲+	3	CIS125	
CIS223	IT Project Management ▲+	3	ITD140	
CPD123	Structured Query Language	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database	3	CPD123	
CSE236	Analyzing Software Requirements and Developing Solutions	3	(CIS221 or CSE235 or CSE229 or CSE231 or CSE233 or WDD221 or WDD222 or WDD224 or WDD225 or WDD226) and CPD123	
ITD140	Digital Project Management^▲-	3	ITD100 or Proficiency	
	Select two (2) Technical Elective from the list below <sup>3</sup> ▲	6	Check for prerequisites	
	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	Effective Speaking	3	None	
or COM122	or Interpersonal Communication	<b>or</b> 3	<b>or</b> None	
or	or	or	or	
COM123	Small Group Communication	3	IDS102 or Proficiency	
CIS126	Fundamentals of Information Systems^	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) <b>and</b> (ITD100 or Proficiency)	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
WDD121	Internet Design and Development^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Social and Behavioral Sciences Elective from the list below <sup>2</sup>	3	Check for prerequisites	
	Total	31		
	TOTAL CREDIT HOURS	61		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>3</sup>Technical Elective: CFS136, CSE235, CSE237, NET120

### **COMPUTER TECHNOLOGY**

5000

### 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

finish in two years.			
<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CIS126	Fundamentals of Information Systems^	3	IDS102 or Proficiency
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency)
CFD121	Data Modernig and Database Design	3	
ITD140	D' 'd D ' d M	2	and (ITD100 or Proficiency)
ITD140	Digital Project Management^▲-	3	ITD100 or Proficiency
WDD121	Internet Design and Development^	<u>3</u>	(IDS102 or Proficiency)
			and (ITD100 or Proficiency)
		13	
Second Semester			
CPD123	Structured Query Language	3	CPD121
CIS223	IT Project Management ▲ +	3	ITD140
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency)
			and (ITD100 or Proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
			Proficiency
MTH118	Quantitative Reasoning^	<u>3</u>	Pre/Co-MTH018 or MTH022 or
	<i>(</i>	-	MTH023 or Proficiency
		15	1/1111020 01 110110101101
Summer Semester		10	
COM121	Effective Speaking	3	None
or	or	or	or
COM122	Interpersonal Communication	3	None
0r	or	_	or
COM123	Small Group Communication^	or 3	IDS102 or Proficiency
			•
Social and Behavioral	Sciences Elective	3	Check for prerequisites
TT1: 1.0		6	
Third Semester	B	2	GPD 141
CIS125	Data Analysis and Decision Making A	3	CPD121
CIS221	Generating Reports for Decision Making ▲-	3	CPD121
CPD224	Advanced Microsoft SQL Server Database	3	CPD123
Technical Elective <sup>3</sup> ▲		<u>3</u>	Check for prerequisites
		12	
Fourth Semester			
CIS222	Data Acquisition and Analysis ▲+	3	CIS125
ITD122	Computer Applications for Professionals	3	ITD100 or Proficiency
Arts & Humanities Ele		3	Check for prerequisites
CSE236	Analyzing Software Requirements and	3	(CIS221 or CSE235 or CSE229 or
552 <b>2</b> 00	Developing Solutions	· ·	CSE231 or CSE233 or WDD221 or
	Beveloping Solutions		WDD222 or WDD224 or
			WDD225 or
			WDD225 of WDD226) and CPD123
Technical Elective³ ▲		3	Check for prerequisites
Technical Elective		3 15	Check for prerequisites
	TOTAL CDEDITS		
AD 1 CCC 1	TOTAL CREDITS	61	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup><u>Arts & Humanities Electives</u>: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social Science Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>3</sup>Technical Electives: CFS136, CSE235, CSE237, NET120



### ASSOCIATE OF APPLIED BUSINESS

**COMPUTER TECHNOLOGY – HELP** 

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## **DESK/COMPUTER SUPPORT SPECIALIST MAJOR**



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division

Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS125	Data Analysis and Decision Making ▲	3	CPD121	
CIS221	Generating Reports for Decision Making ▲-	3	CPD121	
CIS224	Advanced Help Desk ▲+	3	CIS121	
CPD123	Structured Query Language	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database	3	CPD123	
CSE236	Analyzing Software Requirements and Developing Solutions	3	(CIS221 or CSE235 or CSE229 or CSE231 or CSE233 or WDD221 or WDD222 or WDD224 or WDD225 or WDD226) and CPD123	
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	30		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
COM121	Effective Speaking	3	None	
or	or	or	or	
COM122	Interpersonal Communication	3	None	
0r	or	or	or	
COM123	Small Group Communication^	3	IDS102 or Proficiency	
CIS121 CIS126	Help Desk and Computer Support Concepts^▲- Fundamentals of Information Systems^	3	IDS102 or Proficiency IDS102 or Proficiency	
CIS126 CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	and (ITD100 or Proficiency) (IDS102 or Proficiency) and (ITD100 or Proficiency)	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
WDD121	Internet Design and Development^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Social and Behavioral Sciences Elective from the list below <sup>2</sup>	3	Check for prerequisites	
	Total	31		
	TOTAL CREDIT HOURS	61		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup> Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225 Students completing this degree may be eligible to also receive a Computer Maintenance & Desktop Support Technician One-Year Certificate (5026) and a Management Information Systems - Help Desk and Computer User Support Career Enhancement Certificate (5030).

## COMPUTER TECHNOLOGY – HELP DESK/COMPUTER SUPPORT SPECIALIST MAJOR

5011

### 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

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 <b>or</b> Proficiency
CIS126	Fundamentals of Information Systems	3	IDS102 or Proficiency
	·		(IDS102 or Proficiency)
CPD121	Data Modeling and Database Design^	3	and (ITD100 or Proficiency)
NET120	PC Upgrading and Maintenance	3	• /
NET121	Introduction to Computer Networking	<u>3</u>	
Second Semester		16	
CIS224	Advanced Help Desk ▲+	3	CIS121
CPD123	Structured Query Language	3	CPD121
CIDI23	Structured Query Language	3	(IDS102 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	and (ITD100 or Proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
			Proficiency
MTII110	Overtitative Passanine	2	Pre/Co-MTH018 or MTH022 or
MTH118	Quantitative Reasoning^	<u>3</u>	MTH023 or Proficiency
		15	·
Third Semester			
CIS221	Generating Reports for Decision Making ▲-	3	CPD121
CIS125	Data Analysis and Decision Making ▲	3	CPD121
CPD224	Advanced Microsoft SQL Server Database	3	CPD123
NET131	Microsoft Client Operating System	3	NET120 and NET121
WDD121	Internet Design and Development^	<u>3</u>	(IDS102 or Proficiency)
		_ 15	and (ITD100 or Proficiency)
Fourth Semester		13	
Arts & Humanities	s Elective <sup>1</sup>	3	Check for prerequisites
	oral Sciences Elective <sup>2</sup>	3	Check for prerequisites
COM121	Effective Speaking	3	None
or	or	or	or
COM122	Interpersonal Communication	3	None
or	or	or	or
COM123	Small Group Communication <sup>^</sup>	3	IDS102 or Proficiency
NET244	Microsoft Networking I	3	NET120 and NET121
NETZH	Microsoft Networking 1	3	(CIS221 or CSE235 or CSE229 or
		<u>3</u>	CSE231 or CSE233 or WDD221 or
CSE236	Analyzing Software Requirements and	<u>5</u>	WDD222 or WDD224 or
CSE230	Developing Solutions		WDD222 of WDD224 of WDD225 or WDD226) and
			CPD123
		15	CFD123
	TOTAL CDEDITS	61	
	TOTAL CREDITS	01	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup> Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225



### MAP WY ACADEMIC PLAN

## ONE-YEAR CERTIFICATE

**DATA ANALYTICS** 

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

**2024-25 Catalog** Effective Summer 2024

5014

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS125	Data Analysis and Decision Making ▲	3	CPD121	
CIS221	Generating Reports for Decision Making ▲-	3	CPD121	
CIS222	Data Acquisition and Analysis ▲+	3	CIS125	
CIS223	IT Project Management ▲+	3	ITD140	
CPD123	Structured Query Language	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database	3	CPD123	
ITD140	Digital Project Management^▲-	3	ITD100 or Proficiency	
	Total	21		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
CIS126	Fundamentals of Information Systems^	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)	
	Total	10		
	TOTAL CREDIT HOURS	31		

<sup>^</sup>Based upon SSC placement score

Students completing this certificate may be eligible to also receive a Computer Programming and Database – Microsoft SQL Server Career Enhancement Certificate (5206).

The classes in this certificate also apply toward the completion of a Computer Technology Degree (5000).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester Please see your academic advisor for availability.

## ONE-YEAR CERTIFICATE **DATA ANALYTICS**

5014

### 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 students seeking a one-year certificate.

Summer Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CIS126	Fundamentals of Information Systems^	3	IDS102 or Proficiency
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency)
CSE122	Programming Logic and Problem Solving^	<u>3</u>	and (ITD100 or Proficiency) (IDS102 or Proficiency) and (ITD100 or Proficiency)
		10	• /
<u>First Semester</u>			
ITD140	Digital Project Management^▲-	3	ITD100 or Proficiency
CIS125	Data Analysis and Decision Making	3	CPD121
CIS221	Generating Reports for Decision Making ▲-	3	CPD121
CPD123	Structured Query Language	<u>3</u>	CPD121
		12	
Second Semester			
CPD224	Advanced Microsoft SQL Server Database	3	CPD123
CIS222	Data Acquisition and Analysis ▲+	3	CIS125
CIS223	IT Project Management ▲+	<u>3</u>	ITD140
		9	
	TOTALCREDITS	31	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester Please see your academic advisor for availability.

# Stark State

### **ONE-YEAR CERTIFICATE**

### **2024-25 Catalog**

Effective Summer 2024

5026

# COMPUTER MAINTENANCE & DESKTOP SUPPORT TECHNICIAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division

Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS126	Fundamentals of Information Systems^	3	IDS102 or Proficiency	
CIS224	Advanced Help Desk ▲+	3	CIS121	
CPD123	Structured Query Language	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	
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)	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
	Total	10		
	TOTAL CREDIT HOURS	31		

<sup>^</sup>Based on SSC placement score.

Students completing this certificate may be eligible to also receive a Management Information Systems – Help Desk and Computer User Support Career Enhancement Certificate (5030).

The classes in this certificate also apply toward the completion of a Computer Technology – Help Desk/Computer Support Specialist Major (5011).

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

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

**2024-25 Catalog** 

**ONE-YEAR CERTIFICATE** 

Effective Summer 2024

# COMPUTER MAINTENANCE & DESKTOP SUPPORT TECHNICIAN

5026

### **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 students seeking a one-year certificate.

Summer Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	Take first semester
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency
CPD121	Data Modeling and Database Design^	<u>3</u>	(IDS102 or Proficiency)
		7	and (ITD100 or Proficiency)
First Semester		1	
CIS121	Help Desk and Customer Support Concepts^▲-	3	IDS102 or Proficiency
CIS126	Fundamentals of Information Systems^	3	IDS102 or Proficiency
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	<u>3</u>	
		12	
Second Semester			
CPD123	Structured Query Language	3	CPD121
NET244	Microsoft Networking I	3	NET120 and NET121
CIS224	Advanced Help Desk ▲+	3	CIS121
NET131	Microsoft Client Operating Systems	<u>3</u>	NET120 and NET121
		12	
	TOTAL CREDITS	31	

<sup>^</sup>Based on SSC placement score.

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

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



### ASSOCIATE OF APPLIED BUSINESS

### **WEB DESIGN AND DEVELOPMENT**



5100



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD224	Advanced Microsoft SQL Server Database	3	CPD123	
CSE236	Analyzing Software Requirements and Developing Solutions	3	(CIS221 or CSE235 or CSE229 or CSE231 or CSE233 or WDD221 or WDD222 or WDD224 or WDD225 or WDD226) and CPD123	
WDD122	Web Graphics Design ▲-	3	WDD121	
WDD221	Web Development with JavaScript ▲+	3	CSE122 and 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	ASP .Net MVC Development ▲	3	CSE122 and WDD121	
WDD226	Web Development with PHP and MySQL	3	CSE122 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	
CIS126	Fundamentals of Information Systems^	3	IDS102 or proficiency	
COM121	Effective Speaking	3	None	
or COM122	or Interpersonal Communication	<b>or</b> 3	or None	
or COM123	Small Group Communication^	or 2	or IDS102 or Proficiency	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
CPD123	Structured Query Language	3	CPD121	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
WDD121	Internet Design and Development^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Social and Behavioral Sciences Elective from the list below <sup>2</sup>	3	Check for prerequisites	
	Total	31		
	TOTAL CREDIT HOURS	61		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

### **WEB DESIGN AND DEVELOPMENT**

Effective Summer 2024

### 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

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)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
			Proficiency
CIS126	Fundamentals of Information Systems^	3	IDS102 or Proficiency
WDD121	Internet Design and Development	<u>3</u>	(IDS102 or Proficiency)
WDD1Z1	internet Design and Development	1 <u>5</u>	and (ITD100 or Proficiency)
Second Semester		10	and (11D100 of 11offelency)
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or
WITITIO	Qualititative Reasoning	3	MTH023 or Proficiency
CPD123	Structured Query Language	3	CPD121
WDD221	Web Development with JavaScript ▲+	3	CSE122 and WDD121
	Advanced Cascading Style Sheets $\blacktriangle$ +	3	WDD121
WDD222	Active Server Page Development		CSE122 and WDD121
WDD224	Active Server Page Development	3 15	CSE122 and WDD121
G G 4		15	
Summer Semester	D.C. 4: C. 1:	2	N
COM121	Effective Speaking	3	None
0r	or	or	or
COM122	Interpersonal Communication	3	None
0r	or	or	or
COM123	Small Group Communication^	3	IDS102 or Proficiency
Arts & Humanities E	lective <sup>1</sup>	3 6	Check for prerequisites
		6	
Third Semester			
CPD224	Advanced Microsoft SQL Server Database	3	CPD123
WDD122	Web Graphics Design ▲-	3	WDD121
WDD225	ASP .Net MVC Development ▲	3	CSE122 and WDD121
WDD223	Content Management System Design and		
	Development ▲	<u>3</u>	CPD121 and WDD121
	•	12	
Fourth Semester			
Social and Behavior	al Sciences Elective <sup>2</sup>	3	
CSE236	Analyzing Software Requirements and Developing		(CIS221 or CSE235 or CSE229 or
	Solutions	3	CSE231 or CSE233 or WDD221 or
			WDD222 or WDD224 or
			WDD225 or
			WDD226) and CPD123
WDD226	Web Development with PHP and MySQL	3	CSE122 and WDD121
WDD229	Advanced Web Design ▲+	<u>3</u>	WDD122
		12	
	TOTAL CREDITS	61	
APagad upon SSC places	mant saara		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225



## ONE-YEAR CERTIFICATE

### **WEB DESIGN**

**2024-25 Catalog**Effective Summer 2024

rective Summer 202

5125



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD123	Structured Query Language	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database	3	CPD123	
WDD122	Web Graphics Design ▲-	3	WDD121	
WDD223	Content Management Systems Design and Development ▲	3	CPD121 and WDD121	
WDD221	Web Development with JavaScript ▲+	3	CSE122 and WDD121	
WDD222	Advanced Cascading Style Sheets ▲+	3	WDD121	
WDD229	Advanced Web Design ▲+	3	WDD122	
	Total	21		
NON EE CIT				
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
	Course Title  Student Success Seminar^^	Credits	Pre- and Co-Requisites  Take first semester	
Course Number			-	
SSC101	Student Success Seminar^^	1	Take first semester (IDS102 or Proficiency)	
Course Number SSC101 CPD121	Student Success Seminar^^  Data Modeling and Database Design^	3	Take first semester  (IDS102 or Proficiency) and (ITD100 or Proficiency)  (IDS102 or Proficiency) and (ITD100 or Proficiency) Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
Course Number SSC101 CPD121 CSE122	Student Success Seminar^^  Data Modeling and Database Design^  Programming Logic and Problem Solving^	3 3	Take first semester  (IDS102 or Proficiency) and (ITD100 or Proficiency)  (IDS102 or Proficiency) and (ITD100 or Proficiency) Pre/Co-MTH018 or MTH022 or MTH023 or	
SSC101 CPD121 CSE122 MTH118	Student Success Seminar^^  Data Modeling and Database Design^  Programming Logic and Problem Solving^  Quantitative Reasoning^	1 3 3 3	Take first semester  (IDS102 or Proficiency) and (ITD100 or Proficiency) (IDS102 or Proficiency) and (ITD100 or Proficiency) Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency (IDS102 or Proficiency)	

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Web Design and Development Degree (5100).

 $<sup>{}^{\</sup>wedge}\text{To}$  promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester. Please see your academic advisor for availability.

### **ONE-YEAR CERTIFICATE**

### **WEB DESIGN**

5125

### 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 students seeking a one-year certificate.

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 Design and Development^	<u>3</u>	(IDS102 or Proficiency) and (ITD100 or Proficiency)
		10	
First Semester			
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency
WDD122	Web Graphics Design ▲ -	3	WDD121
WDD223	Content Management Systems Design and Development ▲	3	CPD121 and WDD121
CPD123	Structured Query Language	<u>3</u>	CPD121
		12	
Second Semester			
CPD224	Advanced Microsoft SQL Server Database	3	CPD123
WDD221	Web Development with JavaScript ▲+	3	CSE122 and WDD121
WDD222	Advanced Cascading Style Sheets ▲+	3	WDD121
WDD229	Advanced Web Design ▲+	<u>3</u>	WDD122
		12	
	TOTAL CREDITS	34	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲ +</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester. Please see your academic advisor for availability.



### ASSOCIATE OF APPLIED BUSINESS

2024-25 Catalog Effective Summer 2024

### **5200**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

**COMPUTER PROGRAMMING AND DATABASE** 

Business, Engineering, and Information Technology Division Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS125	Data Analysis and Decision Making ▲	3	CPD121	
CIS221	Generating Reports for Decision Making ▲-	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database	3	CPD123	
CSE229	.Net Development	3	CSE122	
CSE230	Advanced .Net Development ▲-	3	CSE229	
CSE236	Analyzing Software Requirements and Developing Solutions	3	(CIS221 or CSE235 or CSE229 or CSE231 or CSE233 or WDD221 or WDD222 or WDD224 or WDD225 or WDD226) and CPD123	
WDD224	Active Server Page Development	3	CSE122 and WDD121	
WDD225	ASP.Net MVC Development ▲	3	CSE122 and WDD121	
WDD226	Web Development with PHP and MySQL	3	CSE122 and WDD121	
	Select two (2) Technical Elective from the list below <sup>3</sup> ▲	6	Check for prerequisites	
	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	Effective Speaking	3	None	
or	or	or	or	
COM122	Interpersonal Communication	3	None	
or	or	or	or	
COM123	Small Group Communication^	3	IDS102 or Proficiency	
CIS126	Fundamentals of Information Systems^	3	IDS102 or Proficiency	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
CPD123	Structured Query Language	3	CPD121	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
WDD121	Internet Design and Development^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Social and Behavioral Sciences Elective from the list below <sup>2</sup>	3	Check for prerequisites	
	Total	31		
ADagad yman SSC plag	TOTAL CREDIT HOURS	64		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>3</sup>Technical Elective: CSE231, CSE233, CSE235, WDD221, WDD222

### 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

<u>First Semester</u> SSC101	Student Success Seminar^^	Credit Hours	Pre- and Co-requisites Take first semester
CIS126	Fundamentals of Information Systems^	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)
WDD121	Internet Design and Development^	<u>3</u>	(IDS102 or Proficiency)  and (ITD100 or Proficiency)
C1 C		13	
Second Semester CIS125	Data Analysis and Decision Making ▲	3	CPD121
CPD123	Structured Query Language	3	CPD121
CSE229	.Net Development	3	CSE122
	•		Pre/Co-MTH018 or MTH022 or
MTH118	Quantitative Reasoning^	3	MTH023 or Proficiency
WDD224	Active Server Page Development	3 15	CSE122 and WDD121
Summer Semester		10	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
Arts & Humanities Ele	ective <sup>1</sup>	<u>3</u>	Check for prerequisites
		6	
Third Semester		2	CDD 121
CIS221	Generating Reports for Decision Making ▲-	3	CPD121
CPD224 CSE230	Advanced Microsoft SQL Server Database Advanced .Net Development ▲-	3	CPD123 CSE229
Technical Elective <sup>3</sup>	Advanced .Net Development -	3	CSE229 Check for prerequisites
WDD225	ASP.Net MVC Development ▲	3 <u>3</u>	CSE122 and WDD121
W DD223	ASI . Net WIVE Development	<u>3</u> 15	CSE122 and WDD121
Fourth Semester		13	
COM121	Effective Speaking	3	None
or	or	or	or
COM122	Interpersonal Communication	3	None
or	or	or	or
COM123	Small Group Communication <sup>^</sup>	3	IDS102 or Proficiency
CSE236	Analyzing Software Requirements and Developing Solutions	3	(CIS221 or CSE235 or CSE229 or CSE231 or CSE233 or WDD221 or WDD222 or WDD224 or
			WDD225 or WDD226) <b>and</b> CPD123
WDD226	Web Development with PHP and MySQL	3	CSE122 and WDD121
Technical Elective <sup>3</sup>	co bevelopment with 1111 and myoQL	3	Check for prerequisites
Social and Behavioral	Sciences Elective <sup>2</sup>	<u>3</u>	Check for prerequisites
~ 0 - 1000 00000 10000000000000000000000		15	successive proceduration
	TOTAL CREDITS	64	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225 <sup>3</sup>Technical Elective: CSE231, CSE233, CSE235, WDD221, WDD222



## ONE-YEAR CERTIFICATE

### **DATABASE SYSTEMS**

2024-25 Catalog

Effective Summer 2024

**5204** 



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS125	Data Analysis and Decision Making ▲	3	CPD121	
CIS221	Generating Reports for Decision Making ▲-	3	CPD121	
CPD123	Structured Query Language	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database	3	CPD123	
WDD225	ASP.Net MVC Development ▲	3	CSE122 and WDD121	
WDD226	Web Development with PHP and MYSQL	3	CSE122 and WDD121	
	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)	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
WDD121	Internet Design and Development^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
	Total	13		
	TOTAL CREDIT HOURS	31		

<sup>^</sup>Based upon SSC placement score

Students completing this certificate may be eligible to also receive a Computer Programming and Database – Microsoft SQL Server Career Enhancement Certificate (5206).

The classes in this certificate also apply toward the completion of a Computer Programming and Database Degree (5200).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester. Please see your academic advisor for availability.

### **ONE-YEAR CERTIFICATE**

### **DATABASE SYSTEMS**

5204

### 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 students seeking a one-year certificate.

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)
CSE122	Programming Logic and Problem Solving^	3	and (ITD100 or Proficiency) (IDS102 or Proficiency) and (ITD100 or Proficiency)
WDD121	Internet Design and Development^	<u>3</u>	(IDS102 or Proficiency)
		10	and (ITD100 or Proficiency)
First Semester			
CPD123	Structured Query Language	3	CPD121
CIS221	Generating Reports for Decision Making ▲ -	3	CPD121
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency
WDD226	Web Development with PHP and MYSQL	<u>3</u>	CSE122 and WDD121
		12	
Second Semester			
CPD224	Advanced Microsoft SQL Server Database	3	CPD123
WDD225	ASP.Net MVC Development▲	3	CSE122 and WDD121
CIS125	Data Analysis and Decision Making ▲	<u>3</u>	CPD121
		9	
	TOTAL CREDITS	31	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester. Please see your academic advisor for availability.



### ASSOCIATE OF APPLIED SCIENCE

### COMPUTER SCIENCE AND ENGINEERING

**2024-25 Catalog** Effective Summer 2024

5250



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD123	Structured Query Language	3	CPD121	
CSE229	.Net Development	3	CSE122	
CSE230	Advanced .Net 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	SE236 Analyzing Software Requirements and Developing Solutions 3 CSE231 or CSE233 or WDD221 or WDD222 or WDD224 or WDD222		(CIS221 or CSE235 or CSE229 or CSE231 or CSE233 or WDD221 or WDD222 or WDD224 or WDD225 or WDD226) and CPD123	
	Select two (2) Technical Electives from the list below <sup>3</sup> ▲	6	Check for prerequisites	
	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	Effective Speaking	3	None	
0r	or	or	or	
COM122 or	Interpersonal Communication	3 <b>or</b>	None or	
COM123	Small Group Communication^	3	IDS102 or Proficiency	
CIS126	Fundamentals of Information Systems^	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)	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
CSE121	Mobile Development Architecture	3	pre-co-CSE122	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
WDD121	Internet Design and Development <sup>^</sup>	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Social and Behavioral Sciences Elective from the list below <sup>2</sup>	3	Check for prerequisites	_
	Total	33		
	TOTAL CREDIT HOURS	63		

<sup>^</sup>Based upon SSC placement score

Students completing this degree may be eligible to also receive a Computer Science and Engineering - C++ Programming Career Enhancement Certificate (5255), an Artificial Intelligence Career Enhancement Certificate (5248), an Artificial Intelligence Fundamentals Career Enhancement Certificate (5249), a Computer Science and Engineering – Java Programming Career Enhancement Certificate (5257) and a Computer Science Career Enhancement Certificate (5258).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>3</sup>Technical Electives: AIN121, CSE221, CSE226, CSE235, CSE237, MTH214, WDD221, WDD224, WDD225, WDD226

5250

Effective Summer 2024

### 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

ish in two years.			
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)
CIDIZI	Data Wodering and Database Design	3	and (ITD100 or Proficiency)
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency)
CSE122		3	and (ITD100 or Proficiency)
	Precalculus^- A student may take MTH125		
MTH135	(College Algebra) and MTH130 (Trigonometry)	5	MTH025 or Proficiency
	over two semesters to satisfy this requirement.		
WDD121	Internet Design and Development^	<u>3</u>	(IDS102 or Proficiency)
	invented Besign and Beverepinent		and (ITD100 or Proficiency)
		15	
Second Semester			
CPD123	Structured Query Language	3	CPD121
CSE229	.Net Development	3	CSE122
CSE231	Java Programming	3	CSE122
CSE233	C++ Programming	3	CSE122
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
		15	
Summer Semester			
COM121	Effective Speaking	3	None
or	or	or	or
COM122	Interpersonal Communication	3	None
or	or	or	or
COM123	Small Group Communication^	3	IDS102 or Proficiency
Social and Behavio	oral Sciences Elective <sup>2</sup>	<u>3</u>	Check for prerequisites
		6	
Third Semester			
CIS126	Fundamentals of Information Systems^	3	IDS102 or Proficiency
CSE230	Advanced .Net Development ▲-	3	CSE229
CSE232	Advanced Java Programming	3	CSE231
CSE234	Advanced C++ Programming ▲-	3	CSE233
CSE121	Mobile Development Architecture	<u>3</u>	pre-co-CSE122
	•	15	•
Fourth Semester			
Arts & Humanities	Elective <sup>1</sup>	3	Check for prerequisites
			(CIS221 or CSE235 or CSE229 or CSE231
CCE22	Analyzing Software Requirements and Developing	2	or CSE233 or WDD221 or WDD222 or
CSE236	Solutions	3	WDD224 or WDD225 or WDD226) and
			CPD123
Technical Elective <sup>3</sup>	3▲	3	Check for prerequisites
Technical Elective <sup>3</sup>		<u>3</u>	Check for prerequisites
		12	v 1 1
	TOTAL CREDITS	63	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>3</sup>Technical Electives: AIN121, CSE221, CSE226, CSE235, CSE237, MTH214, WDD221, WDD224, WDD225, WDD226

# **Stark State**

### ASSOCIATE OF APPLIED SCIENCE

### **COMPUTER SCIENCE & ENGINEERING – VIDEO GAME DESIGN AND DEVELOPMENT MAJOR**

**2024-25 Catalog** 

Effective Summer 2024

5253



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SGE221	Advanced Gaming and Simulation Topics ▲+	3	SGE222	
SGE222	3D Game Design and Development ▲-	3	SGE223	
SGE223	2D Game Design and Development ▲+	3	CSE122 and SGE121	
SGE224	Game Programming I ▲+	3	CSE122	
SGE225	Assets for Games ▲+	3	SGE121	
SGE226	Game Programming II ▲-	3	SGE224	
SGE230	Game Portfolio	3	pre-co-SGE221	
	Choose One Track	from below	···	
Web Design Track	ί			
WDD222	Advanced Cascading Style Sheets ▲+	3	WDD121	
WDD226	Web Development with PHP and MySQL	3	CSE122 and WDD121	
WDD221	Web Development with JavaScript ▲+	3	CSE122 and WDD121	
Computer Science	Track			
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
CSE233	C++ Programming	3	CSE122	
CSE231	Java Programming	3	CSE122	
	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	Effective Speaking	3	None	
or	or	or	or	
COM122	Interpersonal Communication	3	None	
or	or	or	or	
COM123	Small Group Communication^	3	IDS102 or Proficiency	
CSE121	Mobile Development Architecture	3	pre-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	Co-ENG024 or Co-ENG011 or Proficiency	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
WDD121	Internet Design and Development^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
IMT129	Digital Audio Recording and Editing	3		
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Social and Behavioral Sciences Electivefrom the list below <sup>2</sup>	3	Check for prerequisites	
	Total	33		
	TOTAL CREDIT HOURS	63		

See footnotes on reverse side.

## COMPUTER SCIENCE & ENGINEERING – VIDEO GAME DESIGN AND DEVELOPMENT MAJOR

5253

### 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

First Semester		Credit Hours	Dra and Ca requisites
SSC101	Student Success Seminar^^	1	<u>Pre- and Co-requisites</u> Take first semester
330101	Precalculus^ – A student may take MTH125	1	i uke jirsi semesier
MTH135	(College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)
SGE121	Game Design^▲-	3	IDS102 or Proficiency
WDD121	Internet Design and Development^	<u>3</u>	(IDS102 or Proficiency) and (ITD100 or Proficiency)
		15	
Second Semester		2	
Track Elective I		3	Check for prerequisites
SGE224	Game Programming I ▲+	3	CSE122
SGE225	Assets for Games ▲+	3	SGE121
SGE223	2D Game Design and Development ▲+	3	CSE122 and SGE121 Co-ENG024 or Co-ENG011 or
ENG124	College Composition^	<u>3</u>	Proficiency
		15	, and the second
Summer Semeste			
COM121	Effective Speaking	3	None
or	0r	or	or
COM122	Interpersonal Communication	3	None
or	or	or	or
COM123	Small Group Communication^	3	IDS102 or Proficiency
Social and Behav	vioral Sciences Elective <sup>2</sup>	3 6	Check for prerequisites
mi i a		6	
Third Semester	F1 1	2	
Arts & Humanitie		3	Check for prerequisites
Track Elective II		3	Check for prerequisites
SGE226	Game Programming II ▲ -	3	SGE224
SGE222	3D Game Design and Development ▲-	3	SGE223
CSE121	Mobile Development Architecture	<u>3</u>	pre-co-CSE122
Equath Compactor		15	
Fourth Semester Track Elective III	<i>1</i> ▲	3	Charle for propagatisites
SGE221			Check for prerequisites SGE222
SGE221 SGE230	Advanced Gaming and Simulation Topics ▲+ Game Portfolio	3 3	pre-co-SGE221
IMT129	Digital Audio Recording and Editing	3 <u>3</u>	pre-co-80E221
11711127	Digital Audio Recolding and Editing	<u>3</u> 12	
	TOTAL CREDITS	63	
1 000 1	IOTAL CREDITS	05	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> Course offerings vary by semester. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225 See reverse side for Track Options.



# ASSOCIATE OF APPLIED SCIENCE 3D MOTION GRAPHICS TECHNOLOGY

**2024-25 Catalog** 

Effective Summer 2024

5300



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT125	3D Graphics Modeling	3		
IMT136	Principles of Animation	3		
IMT227	3D Graphics Animation ▲-	3	IMT136 and IMT125	
IMT237	Compositing	3	IMT223	
IMT240	Advanced 3D Graphics Modeling ▲-	3	IMT125	
IMT243	Advanced Compositing ▲+	3	IMT237	
IMT245	Graphic Arts Design II	3	IMT122	
IMT249	Textures for 2D and 3D Design ▲-	3	IMT122 and 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	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
IMT121	Interactive Media	3		
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency	
IMT137	Drawing Basics	3		
IMT223	Digital Video Recording and Editing^	3	ITD100 or Proficiency	
ITD122	Computer Applications for Professionals^*	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
	Select one (1) Social and Behavioral Sciences Elective from the list below. <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Natural Science Elective from the list below. <sup>2</sup>	4		
	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>2</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲ +</sup> Spring only courses. Please see your academic advisor for availability.

Effective Summer 2024

### **3D MOTION GRAPHICS TECHNOLOGY**

5300

#### **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

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	ITD100 or Proficiency
IMT136	Principles of Animation	3	
IMT137	Drawing Basics	<u>3</u>	
		13	
Second Semeste	e <u>r</u>		
IMT125	3D Graphics Modeling	3	
IMT223	Digital Video Recording and Editing^	3	ITD100 or Proficiency
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or
			MTH023 or Proficiency
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or
		4.0	Proficiency
G G		12	
Summer Semes		2	
COM121	Effective Speaking	3	TED 100 D. C.
ITD122	Computer Applications for Professionals <sup>↑</sup> ♣	<u>3</u>	ITD100 or Proficiency
TI: 10		6	
Third Semester	2D C 1' A ' 4' A	2	DAT126 J DAT125
IMT227	3D Graphics Animation ▲-	3	IMT136 and IMT125
IMT237	Compositing	3	IMT223
IMT240	Advanced 3D Graphics Modeling ▲-	3	IMT125
IMT268	Advanced Video Editing	3	IMT223
IMT249	Textures for 2D and 3D Design ▲-	<u>3</u>	IMT122 and IMT125
E41 C4-	_	15	
Fourth Semeste IMT243		2	IMT237
	Advanced Compositing ▲ +	3	
IMT245	Graphic Arts Design II	3	IMT122
IMT265	Motion Graphics Portfolio	3	IMT268
Social and Behav Elective <sup>I</sup>		3	Check for prerequisites
Natural Science	e Elective <sup>2</sup>	4	
		16	
	TOTAL CREDITS	62	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>2</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



#### ASSOCIATE OF APPLIED SCIENCE

### COMPUTER ENGINEERING

**2024-25 Catalog** 

Effective Summer 2024

5350



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Computer Science and Information Systems Department Business, Engineering, and Information Technologies Division

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CSE231	Java Programming	3	CSE122	
CSE232	Advanced Java Programming	3	CSE231	
CSE233	C++ Programming	3	CSE122	
CSE234	Advanced C++ Programming ▲-	3	CSE233	
EET120	DC Circuit Analysis	4	pre-co-MTH125 <b>or</b> pre-co-MTH135	
EET122	AC Circuit Analysis	4	(pre-co-MTH130 or pre-co- MTH135) and EET120	
EET227	PLC's and Industrial Controls I	3	EST230 or EET120	
MTH223	Analytical Geometry and Calculus I^*	4	MTH135	
NET120	PC Upgrading and Maintenance	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	
COM121	Effective Speaking	3	None	
or	or	or	or	
COM122	Interpersonal Communication	3	None	
or	or	or	or	
COM123	Small Group Communication <sup>^</sup>	3	IDS102 or Proficiency	
CHM141	General Chemistry I^	5	(CHM101 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Social and Behavioral Sciences Elective from the list below <sup>2</sup>	3	Check for prerequisites	
	Total	33		
	TOTAL CREDIT HOURS	63		

<sup>^</sup>Based on SSC placement score

Students completing this degree may be eligible to also receive a Computer Science and Engineering – C++ Programming Career Enhancement Certificate (5255) and a Computer Science and Engineering – Java Programming Career Enhancement Certificate (5257).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>\*</sup> Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

Effective Summer 2024

### **COMPUTER ENGINEERING**

5350

#### 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

iish in two years.			
First Semester	Course Title	Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
NET120	PC Upgrading and Maintenance	3	·
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency)
			and (ITD100 or Proficiency)
COM121	Effective Speaking	3	None
or	or	or	or
COM122	Interpersonal Communication	3	None
or	or	or	or
COM123	Small Group Communication^	3	IDS102 or Proficiency
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or
	8 1	<del>-</del>	Proficiency
		13	,
Second Semester			
			pre-co-MTH125 or
EET120	DC Circuit Analysis	4	pre-co-MTH135
MTH135	Precalculus^ – A student may take MTH125	5	Pro de discussión
	(College Algebra) and MTH130 (Trigonometry)	-	MTH025 or Proficiency
	over two semesters to satisfy this requirement.		ž
CSE231	Java Programming	3	CSE122
CSE233	C++ Programming	<u>3</u>	CSE122
		15	
Summer Semester			
EET122	AC Circuit Analysis	4	(pre-co-MTH130 <b>or</b> pre-co-MTH135)
	·		and EET120
Arts & Humanities	Elective <sup>1</sup>	3	Check for prerequisites
Social and Behavio	oral Sciences Elective <sup>2</sup>	<u>3</u>	Check for prerequisites
		10	
Third Semester			
CSE234	Advanced C++ Programming ▲ -	3	CSE233
EET227	PLC's and Industrial Controls I	3	EST230 or EET120
ENG221	Technical Report Writing	3	ENG124
CSE232	Advanced Java Programming	<u>3</u>	CSE231
	Ç Ç	12	
Fourth Semester			
CHM141	General Chemistry I^	5	CHM101 or Proficiency
MTH223	Analytical Geometry and Calculus I^*	4	MTH135
PHY121	College Physics I with Algebra (lab)^	<u>4</u>	MTH135 or (MTH125 and MTH130)
		_	or Proficiency
		13	·
	TOTAL CREDITS	63	
1 000 1			

 $<sup>^{\</sup>wedge}$ Based on SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>\*</sup>Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.



#### ASSOCIATE OF APPLIED SCIENCE

## **2024-25 Catalog**

Effective Summer 2024

5400

# COMPUTER NETWORK ADMINISTRATION & SECURITY TECHNOLOGY

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

Business, Engineering, and Information Technology Division

Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CPD123	Structured Query Language	3	CPD121	
NET137	CCNA Phase 2 ▲	3	NET121	
NET220	UNIX/LINUX Operating Environment	3	NET120 and NET121	
NET244	Microsoft Networking I	3	NET120 and NET121	
NET245	Microsoft Networking II ▲+	3	NET244	
NET246	Microsoft Networking III ▲-	3	NET244	
NET253	Securing Network Switches and Routers ▲-	3	pre-co-NET137	
NET256	CCNA Phase 3 ▲+	3	NET137	
NET264	UNIX/LINUX System Administration ▲+	3	NET220	
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	
COM121	Effective Speaking	3		
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) <b>and</b> (ITD100 or Proficiency)	
ENG124	College Composition^	3	co-ENG024 or co-ENG011 or Proficiency	
MTH125	College Algebra^	4	pre-co-MTH025 or MTH023 or Proficiency	
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
NET131	Microsoft Client Operating System	3	NET120 and NET121	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Social and Behavioral Sciences Elective from the list below <sup>2</sup>	3	Check for prerequisites	
	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement score

Students completing this degree may be eligible to also receive a Microsoft Networking Career Enhancement Certificate (5407) and a Cisco Technology Career Enhancement Certificate (5408).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Elective: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester. Please see your academic advisor for availability.

#### 2024-25 Catalog

Effective Summer 2024

# COMPUTER NETWORK ADMINISTRATION & SECURITY TECHNOLOGY

5400

#### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)
NET120	PC Upgrading and Maintenance	3	(212100 011101101010)
NET121	Introduction to Computer Networking	3 13	
		13	
Second Semester			
MTH125	College Algebra^	4	pre-co-MTH025 <b>or</b> MTH023 <b>or</b> Proficiency
NET131	Microsoft Client Operating System	3	NET120 and NET121
NET137	CCNA Phase 2 ▲	3	NET121
NET220	UNIX/LINUX Operating Environment	3	NET120 and NET121
NET244	Microsoft Networking I	<u>3</u>	NET120 and NET121
		16	
Summer Semester	<u>:</u>		
CPD121	Data Modeling and Database Design	3	(IDS102 or Proficiency) <b>and</b> (ITD100 or Proficiency)
COM121	Effective Speaking	$\frac{3}{6}$	•
	•	6	
Fourth Semester			
NET253	Securing Network Switches and Routers ▲-	3	pre-co-NET137
NET245	Microsoft Networking II ▲+	3	NET244
CPD123	Structured Query Language	3	CPD121
Arts & Humanitie	s Elective <sup>1</sup>	$\frac{3}{12}$	
		12	
Fifth Semester			
NET246	Microsoft Networking III ▲ -	3	NET244
NET264	UNIX/LINUX System Administration ▲+	3	NET220
NET256	CCNA Phase 3 ▲+	3	NET137
NET281	Firewall and Network Security ▲+	3	NET137
Social Science Ele	ective <sup>2</sup>	<u>3</u>	Check for prerequisites
		15	
	TOTAL CREDITS	62	

<sup>^</sup>Based on SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Social and Behavioral Sciences Elective: PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲</sup> Courses vary by semester. Please see your academic advisor for availability.



### ASSOCIATE OF APPLIED SCIENCE

# CYBER SECURITY AND COMPUTER FORENSICS TECHNOLOGY

2024-25 Catalog

Effective Summer 2024

5450



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

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	
CFS210	Cyber Defense Fundamentals▲-	3	CFS136 and NET220	
CFS250	Cyber Security and Digital Forensics Practicum	2	CFS256 and CFS275	
CFS256	Disaster Recovery and Incident Planning ▲+	3		
CFS257	File Systems Analysis ▲-	3	CFS137	
CFS258	Cyber Forensics and Data Recovery▲+	3	CFS257	
CFS275	Ethical Hacking▲-	3	NET120 and NET220	
CFS280	Digital Media Forensics▲+	3	CFS137	
CFS287	Network Forensics▲+	3	CFS137 and NET121 and NET220	
NET220	UNIX/LINUX Operating Environment	3	NET120 and NET121	
	Total	32		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
ACC237	Forensic Accounting and Fraud Examination^	3	IDS102 or proficiency	
CFS175	White Collar Crime▲-	3		
CHM105	Introduction to Forensic Science	3		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MTH125	College Algebra^	4	Pre-co-MTH025 or MTH023 or Proficiency	
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
SOC225	Diversity in American Society^	3	IDS102 or proficiency	
	Total	32		
	TOTAL CREDIT HOURS	64		

<sup>^</sup>Based upon SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

Effective Summer 2024

# CYBER SECURITY AND COMPUTER FORENSICS TECHNOLOGY

5450

#### 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

First Semester		<u>Credit</u> <u>Hours</u>	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CFS175	White Collar Crime▲-	3	V
COM121	Effective Speaking	3	
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	<u>3</u>	
		13	
Second Semester			
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
CFS136	Principles of Information Security ▲+	3	
CFS137	Computer Crime and Investigation▲+	3	NET120
NET220	UNIX/LINUX Operating Environment	3	NET120 and NET121
MTH125	College Algebra^	<u>4</u>	Pre-co-MTH025 or MTH023 or Proficiency
		16	
Summer Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
SOC225	Diversity in American Society^	<u>3</u>	IDS102 or proficiency
		6	
Third Semester			
CHM105	Introduction to Forensic Science	3	
CFS210	Cyber Defense Fundamentals▲-	3	CFS136 and NET220
ACC237	Forensic Accounting and Fraud Examination^	3	IDS102 or proficiency
CFS257	File Systems Analysis▲-	3	CFS137
CFS275	Ethical Hacking▲-	<u>3</u>	NET120 and NET220
		15	
Fourth Semester			
CFS256	Disaster Recovery and Incident Planning ▲+	3	
CFS280	Digital Media Forensics▲+	3	CFS137
CFS250	Cyber Security and Digital Forensics Practicum▲+	2	CFS256 and CFS275
CFS258	Cyber Forensics and Data Recovery ▲+	3	CFS257
CFS287	Network Forensics ▲+	<u>3</u>	CFS137 and NET121 and NET220
		14	
	TOTAL CREDITS	64	

<sup>^</sup>Based upon SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

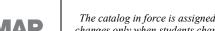
<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



# ASSOCIATE OF APPLIED SCIENCE

### **MUSIC PRODUCTION AND ENGINEERING**



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

5460

Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

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 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	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
IMT121	Interactive Media	3		
IMT223	Digital Video Recording and Editing	3	ITD100 or Proficiency	
IMT230	Webcasting and Music Publishing ▲+	3	IMT129	
IMT266	Film Theory and Practice	3	IMT121	
ITD122	Computer Applications for Professionals^*	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
	Select one (1) Social and Behavioral Sciences Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Natural Science Elective from the list below <sup>2</sup>	4		
	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement score

Students completing this degree may be eligible to also receive a Commercial Music Technology – Music Production Career Enhancement Certificate (5461).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>2</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

### **MUSIC PRODUCTION AND ENGINEERING**

5460

#### 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

<u>First Semester</u> SSC101	Student Success Seminar^^	<u>Credit Hours</u> 1	<u>Pre- and Co-requisites</u> Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
IMT121	Interactive Media	3	of Troneleney
IMT129	Digital Audio Recording and Editing		
IMT135	Music Theory and Composition I ▲-	3 <u>3</u>	
	7	13	
Second Semester			
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022
	_		or MTH023 or Proficiency
IMT134	Technical Musicianship ▲+	3	IMT135
IMT223	Digital Video Recording and Editing	3	ITD100 or Proficiency
IMT247	Music Theory and Composition II ▲+	3	IMT135
IMT250	Music Technology ▲+	<u>3</u>	IMT129
		15	
Summer Semester			
COM121	Effective Speaking	3	
Natural Science El	ective <sup>2</sup>	$\frac{4}{7}$	
		7	
Third Semester		_	
IMT239	Music Synthesis I ▲-	3	IMT129 and IMT247
IMT246	Applied Music Technology ▲-	3	IMT250
IMT260	Live Sound ▲ -	3	IMT129
	oral Sciences Elective <sup>1</sup>	3	Check for prerequisites
ITD122	Computer Applications for Professionals <sup>↑</sup> #	<u>3</u>	ITD100 or Proficiency
E - 41 C - 4		15	
Fourth Semester IMT230	Wahaasting and Music Dublishing A	2	IMT129
	Webcasting and Music Publishing ▲+	3	
IMT259 IMT261	Music Synthesis II ▲ + Advanced Music Technology ▲ +	3	IMT239 IMT239 and IMT246
IMT266		3	IMT1239 and IMT1246
11V1 1 200	Film Theory and Practice	3 3 12	11V1 1 1 2 1
	TOTAL CREDITS	62	
	IUIAL CKEDIIS	UZ	

<sup>^</sup>Based on SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Social and Behavioral Sciences Electives: PSC121, PSY121, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

<sup>&</sup>lt;sup>2</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



# ASSOCIATE OF APPLIED SCIENCE

## **COMPUTER GRAPHIC ARTS**

The catalog in force is assigned to students based on the academic year they first applied to the college, and

changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

**5500** 



Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency	
IMT125	3D Graphics Modeling	3		
IMT132	Digital Photography/Graphic and Media	3		
IMT136	Principles of Animation	3		
IMT141	Typography Fundamentals	3		
IMT244	Digital Page Layout and Design	3	IMT122 and IMT131 and IMT141	
IMT245	Graphic Arts Design II	3	IMT122	
IMT253	Graphics for Illustration	3	IMT122	
IMT254	Portfolio Development	3	IMT244 and IMT245 and IMT253	
IMT255	Advanced Illustration	3	IMT253	
	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	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENT120	Entrepreneurship^	3	IDS102 or Proficiency	
IMT121	Interactive Media	3		
IMT131	Color Theory and Design	3		
IMT137	Drawing Basics	3		
ITD122	Computer Applications for Professionals^*	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
SOC225	Diversity in American Society^	3	IDS102 or proficiency	
	Select one (1) Natural Science Elective from the list below <sup>1</sup>	4		
	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement score

Students completing this degree may be eligible to also receive a Graphic Design Career Enhancement Certificate (5502).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

Effective Summer 2024

#### **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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency
IMT131	Color Theory and Design	3	
IMT141	Typography Fundamentals	<u>3</u>	
		13	
Second Semester			
IMT132	Digital Photography/Graphic and Media	3	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency
IMT245	Graphic Arts Design II	3	IMT122
IMT244	Digital Page Layout and Design	3	IMT122 and IMT131 and IMT141
IMT253	Graphics for Illustration	<u>3</u>	IMT122
		15	
Summer Semester	<u>r</u>		
COM121	Effective Speaking	3	
Natural Science E	Elective <sup>1</sup>	<u>4</u>	
		7	
Third Semester			
IMT121	Interactive Media	3	
IMT125	3D Graphics Modeling	3	
IMT137	Drawing Basics	3	
IMT255	Advanced Illustration	3	IMT253
ITD122	Computer Applications for Professionals <sup>↑</sup> ♣	<u>3</u>	ITD100 or Proficiency
F 4.0		15	
Fourth Semester ENT120	E-4	2	IDC102 D C-:
IMT136	Entrepreneurship^ Principles of Animation	3 3	IDS102 or Proficiency
	•		IMT244 and IMT245
IMT254	Portfolio Development	3	and IMT253
SOC225	Diversity in American Society^	<u>3</u>	IDS102 or proficiency
		12	
	TOTAL CREDITS	62	

<sup>^</sup>Based on SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122



#### ASSOCIATE OF APPLIED SCIENCE

# COMPUTER GRAPHIC ARTS – DIGITAL PHOTOGRAPHY MAJOR

**2024-25 Catalog** 

Effective Summer 2024

5501



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DPH280	Photography Portfolio ▲+	3	IMT263	
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency	
IMT132	Digital Photography/Graphic and Media	3		
IMT244	Digital Page Layout and Design	3	IMT122 and IMT131 and IMT141	
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	
	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	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENT120	Entrepreneurship^	3	IDS102 or Proficiency	
IMT121	Interactive Media	3		
IMT131	Color Theory and Design	3		
IMT141	Typography Fundamentals	3		
ITD122	Computer Applications for Professionals <sup>^</sup> ♣	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
SOC225	Diversity in American Society^	3	IDS102 or proficiency	
	Select one (1) Natural Science Elective from the list below <sup>1</sup>	4		
	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement score

Students completing this degree may be eligible to also receive a Digital Photography Career Enhancement Certificate (5503).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122

<sup>&</sup>lt;sup>1</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

#### **2024-25 Catalog**

Effective Summer 2024

# COMPUTER GRAPHIC ARTS – DIGITAL PHOTOGRAPHY MAJOR

5501

#### 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

First Semester SSC101	Student Success Seminar^^	Credit Hours	<u>Pre- and Co-requisites</u> Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency
IMT132	Digital Photography/Graphic & Media	3	Ž
IMT121	Interactive Media	<u>3</u>	
		13	
Second Semester			
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency
IMT264	Image Management ▲+	3	IMT132
IMT131	Color Theory and Design	3	
IMT245	Graphic Arts Design II	3	IMT122
IMT263	Photographic Lighting ▲+	3 15	IMT132
		15	
Summer Semester			
COM121	Effective Speaking	3	
ITD122	Computer Applications for Professionals <sup>^</sup> ♣	<u>3</u> <b>6</b>	ITD100 or Proficiency
T1: 10 4		6	
Third Semester IMT141	True a green have Expendent and a second also	2	
IMT253	Typography Fundamentals Graphics for Illustration	3 3	IMT122
IMT262	Advanced Digital Photography A -	3	IMT132
Natural Science Elec		<u>4</u>	11V11132
ivaturat Science Elec	uve	13	
Fourth Semester		13	
DPH280	Photography Portfolio <b>▲</b> +	3	IMT263
ENT120	Entrepreneurship <sup>^</sup>	3	IDS102 or Proficiency
IMT256	Digital Imaging ▲+	3	IMT122 and IMT132
IMT244	Digital Page Layout and Design	3	IMT122 and IMT131 and IMT141
SOC225	Diversity in American Society^	$\frac{3}{15}$	IDS102 or proficiency
	TOTAL CREDITS	62	

<sup>^</sup>Based on SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>\*</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 is equivalent to and may be substituted for ITD122 1Natural Science Electives: BIO126, CHM100, GEO141, PHY105



# ASSOCIATE OF APPLIED SCIENCE DIGITAL VIDEO MEDIA TECHNOLOGY

**2024-25 Catalog** 

Effective Summer 2024

**5550** 



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Digital Media and Administrative Technologies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT125	3D Graphics Modeling	3		
or IMT136	or Principles of Animation	<b>or</b> 3		
IMT129	Digital Audio Recording and Editing	3		
IMT223	Digital Video Recording and Editing^	3	ITD100 or Proficiency	
IMT237	Compositing	3	IMT223	
IMT238	Advanced Video Production ▲+	3	IMT242	
IMT242	Lighting and Cinematography ▲-	3	IMT223	
IMT243	Advanced Compositing ▲+	3	IMT237	
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	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENT120	Entrepreneurship^	3	IDS102 or Proficiency	
IMT121	Interactive Media	3		
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency	
IMT132	Digital Photography/Graphic and Media	3		
IMT137	Drawing Basics	3		
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Natural Science Elective from the list below <sup>2</sup>	4		
	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

5550

Effective Summer 2024

#### 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

<u>First Semester</u> SSC101	Student Success Seminar^^	Credit Hours	<u>Pre- and Co-requisites</u> Take first semester
		1	Co-ENG024 or Co-ENG011 or
ENG124	College Composition^	3	Proficiency
IMT121	Interactive Media	3	Tronorchey
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency
IMT223	Digital Video Recording and Editing^	<u>3</u>	ITD100 or Proficiency
		13	•
Second Semester			
IMT129	Digital Audio Recording and Editing	3	
IMT132	Digital Photography/Graphic and Media	3	
IMT237	Compositing	3	IMT223
MTH118	Quantitative Reasoning^	<u>3</u>	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency
		12	of Williozs of Troffciency
Summer Semester		12	
COM121	Effective Speaking	3	
Natural Science Elec			
110000 CO		$\frac{4}{7}$	
Third Semester			
IMT125	3D Graphics Modeling	3	
or	or	or	
IMT136	Principles of Animation	3	
IMT137	Drawing Basics	3	
IMT242	Lighting and Cinematography ▲ -	3	IMT223
IMT266	Film Theory and Practice	3	IMT121
IMT268	Advanced Video Editing	<u>3</u>	IMT223
		15	
Fourth Semester			
IMT238	Advanced Video Production ▲+	3	IMT242
ENT120	Entrepreneurship^	3	IDS102 or Proficiency
IMT243	Advanced Compositing ▲+	3	IMT237
IMT265	Motion Graphics Portfolio	3	IMT268
Arts & Humanities E	Elective <sup>1</sup>	3 15	Check for prerequisites
	TOTAL CREPATE		
	TOTAL CREDITS	62	

<sup>^</sup>Based on SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>2</sup>Natural Science Electives: BIO126, CHM100, GEO141, PHY105

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



# WY ACADEMIC PLAN

#### CAREER ENHANCEMENT CERTIFICATE

# MANAGEMENT INFORMATION SYSTEMS – HELP DESK AND COMPUTER USER SUPPORT

**2024-25 Catalog** 

Effective Summer 2024

5030

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Computer Science and Information Systems Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CIS121	Help Desk and Computer Support Concepts^▲-	3	IDS102 or Proficiency	
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 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
CIS121	Help Desk and Computer Support Concepts^▲-	3	IDS102 or Proficiency
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	<u>3</u>	
		9	
Second Semester			
NET131	Microsoft Client Operating System	3	NET120 and NET121
NET244	Microsoft Networking I	<u>3</u>	NET120 and NET121
		6	
	TOTAL CREDITS	15	

<sup>^</sup> Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Computer Maintenance & Desktop Support Technician One-Year Certificate (5026) and a Computer Technology – Help Desk/Computer Support Specialist Major (5011).

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.



# COMPUTER PROGRAMMING AND DATABASE

- MICROSOFT SQL SERVER

5206

**2024-25 Catalog** 

Effective Summer 2024

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Computer Science and Information Systems Department Business, Engineering, and Information Technologies Division

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)	
CPD123	Structured Query Language	3	CPD121	
CPD224	Advanced Microsoft SQL Server Database	3	CPD123	
	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^	<u>3</u>	(IDS102 or Proficiency) and (ITD100 or Proficiency)
		3	
Second Semester			
CPD123	Structured Query Language	<u>3</u>	CPD121
		3	
Third Semester			
CPD224	Advanced Microsoft SQL Server Database	<u>3</u>	CPD123
		3	
	TOTAL CREDITS	9	

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Data Analytics One-Year Certificate (5014), a Database Systems One-Year Certificate (5204) and a Computer Technology Degree (5000).



# CAREER ENHANCEMENT CERTIFICATE ARTIFICIAL INTELLIGENCE

**2024-25 Catalog** 

Effective Summer 2024

**5248** 

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

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	.Net Development	3	CSE122	
CSE235	Python Development	3	CSE122	
AIN121	Introduction to Artificial Intelligence^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
CPD123	Structured Query Language	3	CPD121	
	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
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and
CSE122	Trogramming Logic and Troolem Solving		(ITD100 or Proficiency)
AIN121	Introduction to Artificial Intelligence^	3	(IDS102 or Proficiency) and
AINIZI	introduction to Artificial intempence		(ITD100 or Proficiency)
CPD121	Data Modeling and Database Design^	<u>3</u>	(IDS102 or Proficiency) and
CIDIZI	Data Wodering and Database Design		(ITD100 or Proficiency)
		9	
Second Semester		Credit Hours	<u>Pre- and Co-requisites</u>
CSE229	.Net Development	3	CSE122
CSE235	Python Development	3	CSE122
CPD123	Structured Query Language	<u>3</u>	CPD121
		9	
	TOTAL CREDITS	18	

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Computer Science and Engineering Degree (5250).



# CAREER ENHANCEMENT CERTIFICATE ARTIFICIAL INTELLIGENCE FUNDAMENTALS

Effective Summer 2024

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

5249

**2024-25 Catalog** 

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

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)	
AIN121	Introduction to Artificial Intelligence^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
CPD121	Data Modeling and Database Design^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
	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
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)
AIN121	Introduction to Artificial Intelligence^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)
CPD121	Data Modeling and Database Design^	<u>3</u>	(IDS102 or Proficiency) and (ITD100 or Proficiency)
	TOTAL CREDITS	9	•

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Computer Science and Engineering Degree (5250).



# COMPUTER SCIENCE AND ENGINEERING – C++ PROGRAMMING

2024-25 Catalog
Effective Summer 2024

5255



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

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	
	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
CSE122	Programming Logic and Problem Solving^	<u>3</u>	(IDS102 or Proficiency) and (ITD100 or Proficiency)
		3	
Second Semester			
CSE233	C++ Programming	<u>3</u>	CSE122
		3	
Third Semester			
CSE234	Advanced C++ Programming ▲ -	<u>3</u>	CSE233
		3	
	TOTAL CREDITS	9	

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Computer Science and Engineering Degree (5250) and a Computer Engineering Degree (5350).

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.



# CAREER ENHANCEMENT CERTIFICATE **VIDEO GAME DESIGN**

**2024-25 Catalog** Effective Summer 2024

5256

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. *3357:15-13-28*.

Business, Engineering, and Information Technologies Division

Computer Science and Information Systems Department

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)	
SGE121	Game Design^▲-	3	IDS102 or Proficiency	
SGE223	2D Game Design and Development ▲+	3	CSE122 and SGE121	
SGE224	Game Programming I▲+	3	CSE122	
	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)
SGE121	Game Design^▲-	<u>3</u>	IDS102 or Proficiency
		6	
Second Semester			
SGE224	Game Programming I ▲+	3	CSE122
SGE223	2D Game Design and Development ▲+	<u>3</u>	CSE122 and SGE121
		6	
	TOTAL CREDITS	12	

<sup>^</sup>Based upon SSC placement score

- ▲+ Spring only courses. Please see your academic advisor for availability.
- ▲ Fall only courses. Please see your academic advisor for availability.

The classes in this certificate also apply toward the completion of a Computer Science & Engineering – Video Game Design and Development Major (5253).



# **COMPUTER SCIENCE AND ENGINEERING -**

**JAVA PROGRAMMING** 

5257

2024-25 Catalog

Effective Summer 2024

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Computer Science and Information Systems Department Business, Engineering, and Information Technologies Division

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	
	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
CSE122	Programming Logic and Problem Solving^	<u>3</u>	(IDS102 or Proficiency) and (ITD100 or Proficiency)
		3	(112100 01110110101010)
Second Semester			
CSE231	Java Programming	<u>3</u>	CSE122
		3	
Third Semester			
CSE232	Advanced Java Programming	<u>3</u>	CSE231
		3	
	TOTAL CREDITS	9	

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Computer Science and Engineering Degree (5250) and a Computer Engineering Degree (5350).



## **COMPUTER SCIENCE**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog**Effective Summer 2024

5258

Business, Engineering, and Information Technologies Division Computer Science and Information Systems Department

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	
CSE233	C++ Programming	3	CSE122	
	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
CSE122	Programming Logic and Problem Solving^	<u>3</u>	(IDS102 or Proficiency) and (ITD100 or Proficiency)
		3	(;)
Second Semester			
CSE231	Java Programming	3	CSE122
CSE233	C++ Programming	<u>3</u>	CSE122
		6	
	TOTAL CREDITS	9	

<sup>^</sup>Based upon SSC placement score

The classes in this certificate also apply toward the completion of a Computer Science and Engineering Degree (5250) and a Computer Engineering Degree (5350).



### MICROSOFT NETWORKING

**2024-25 Catalog** 

Effective Summer 2024

5407



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
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	
NET245	Microsoft Networking II	3	NET244	
NET246	Microsoft Networking III ▲-	3	NET244	
	Total	18		

#### **ADVISING NOTES**

#### Academic Advising

Students should make an appointment to see their advisor 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 students seeking a one-year certificate.

Summer Semester		Credit Hours	Pre- or Co-requisite
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	<u>3</u>	
		6	
Second Semester			
NET244	Microsoft Networking I	3	NET120 and NET121
NET131	Microsoft Client Operating Systems	<u>3</u>	NET120 and NET121
		6	
Third Semester			
NET245	Microsoft Networking II	3	NET244
NET246	Microsoft Networking III ▲ -	<u>3</u>	NET244
		6	
	TOTAL CREDITS	18	

▲- Fall only courses. Please see your academic advisor for availability.

The classes in this certificate also apply toward the completion of a Computer Network Administration & Security Technology Degree (5400).



### CISCO TECHNOLOGY

5408

**2024-25 Catalog** 

Effective Summer 2024

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Computer Science and Information Systems Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NET120	PC Upgrading and Maintenance	3		
NET121	Introduction to Computer Networking	3		
NET137	Routing and Switching Essentials	3	NET121	
NET253	Securing Network Switches and Routers▲-	3	Pre-Co NET137	
NET256	CCNA Phase 3 ▲-	3	NET137	
NET281	Firewall and Network Security ▲+	3	NET137	
	Total	18		

#### **ADVISING NOTES**

#### Academic Advising

Students should make an appointment to see their advisor 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 students seeking a one-year certificate.

Summer Semester		Credit Hours	Pre- and Co-requisites
NET120	PC Upgrading and Maintenance	3	
NET121	Introduction to Computer Networking	<u>3</u>	
		6	
Second Semester			
NET137	Routing and Switching Essentials	3	NET121
NET253	Securing Network Switches and Routers▲-	<u>3</u>	Pre-Co NET137
		6	
Third Semester			
NET256	CCNA Phase 3▲-	3	NET137
NET281	Firewall and Network Security▲+	<u>3</u>	NET137
		6	
	TOTAL CREDITS	18	

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

The classes in this certificate also apply toward the completion of a Computer Network Administration & Security Technology Degree (5400).

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



# COMMERCIAL MUSIC TECHNOLOGY – MUSIC PRODUCTION

MY ACADEMIC PLAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

5461

**2024-25 Catalog** 

Effective Summer 2024

Business, Engineering, and Information Technology Division

Digital Media and Administrative Technologies Department

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	<u>3</u>	
		9	
Second Semester			
IMT247	Music Theory and Composition II ▲+	3	IMT135
IMT250	Music Technology ▲+	<u>3</u>	IMT129
		6	
	TOTAL CREDITS	15	

- ▲- Fall only courses. Please see your academic advisor for availability.
- ▲+ Spring only courses. Please see your academic advisor for availability.

The classes in this certificate also apply toward the completion of a Music Production and Engineering Degree (5460).



# CAREER ENHANCEMENT CERTIFICATE GRAPHIC DESIGN

**2024-25 Catalog** 

Effective Summer 2024

MY ACADEMIC PLAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

5502

Business, Engineering, and Information Technology Division

Digital Media and Administrative Technologies Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency	
IMT131	Color Theory and Design	3		
IMT137	Drawing Basics	3		
IMT141	Typography Fundamentals	3		
IMT244	Digital Page Layout and Design	3	IMT122 and IMT131 and IMT141	
IMT253	Graphics for Illustration	3	IMT122	
	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
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency
IMT131	Color Theory and Design	3	
IMT141	Typography Fundamentals	<u>3</u>	
		9	
Second Semester			
IMT137	Drawing Basics	3	
IMT244	Digital Page Layout and Design	3	IMT122 and IMT131 and IMT141
IMT253	Graphics for Illustration	<u>3</u>	IMT122
		9	
	TOTAL CREDITS	18	

<sup>^</sup> Based upon SSC placement scores

The classes in this certificate also apply toward the completion of a Computer Graphic Arts Degree (5500).



# CAREER ENHANCEMENT CERTIFICATE DIGITAL PHOTOGRAPHY

**2024-25 Catalog** 

Effective Summer 2024

5503



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technology Division

Digital Media and Administrative Technologies Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency	
IMT131	Color Theory and Design	3		
IMT132	Digital Photography/Graphic and Media	3		
IMT256	Digital Imaging ▲+	3	IMT122 and IMT132	
IMT263	Photographic Lighting ▲+	3	IMT132	
IMT264	Image Management ▲+	3	IMT132	
	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
IMT122	Graphic Arts Design^	3	ITD100 or Proficiency
IMT131	Color Theory and Design	3	
IMT132	Digital Photography/Graphic and Media	<u>3</u>	
		9	
Second Semester	-		
IMT256	Digital Imaging ▲+	3	IMT122 and IMT132
IMT263	Photographic Lighting ▲+	3	IMT132
IMT264	Image Management ▲+	<u>3</u>	IMT132
		9	
	TOTAL CREDITS	18	

<sup>^</sup> Based upon SSC placement scores

The classes in this certificate also apply toward the completion of a Computer Graphic Arts - Digital Photography Major (5501).

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



## career community:

culinary

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. 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.



## ASSOCIATE OF APPLIED BUSINESS

# **BUSINESS MANAGEMENT – CULINARY ARTS**



changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

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Business, Engineering, and Information Technologies Division

Management and Marketing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CUL122	Food Fundamentals	3	pre-co-CUL119 and pre-co-CUL120	
CUL123	Fundamental Cooking – Preparation I	3	CUL122	
CUL124	Meat and Fish – Preparation II	3	CUL123	
CUL125	Culinary Nutrition/Menu Planning	3	CUL119 and CUL120	
CUL221	Baking and Pastry – Preparation III	3	CUL122 and ITD122	
CUL222	Advanced Cookery – Preparation IV	3	pre-co-CUL124	
CUL223	Catering, Beverage and Food Services	3	CUL122	
CUL225	Advanced Portfolio Management	3	CUL124 and CUL221	
CUL226	Pantry and Garde Manger	3	CUL122	
CUL230	Culinary Practicum	5	pre-co-CUL222	
	Total	32		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
BUS121	Business Administration^	3	IDS102 or Proficiency	
or ENT120	or Entermone consider	or	or IDS102 or Proficiency	
CUL119	Entrepreneurship^ Culinary ServSafe	3 1	IDS102 of Proficiency	
CUL120	Sanitation and Safety	2		
CUL126	Food Purchasing – Inventory Control	3	CUL122 and ITD122	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
FIN110	Personal Finance	2		
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency	
MGT121	Principles of Management	3	BUS121 or ENT120	
MTH118	Quantitative Reasoning^	3	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency	
PHL122	Ethics	3		
SOC225	Diversity in American Society^	3	IDS102 or proficiency	
	Total	30	•	
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122

Effective Summer 2024

#### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CUL119	Culinary ServSafe	1	
CUL120	Sanitation and Safety	2	
CUL122	Food Fundamentals	3	pre-co-CUL119  and pre-co-CUL120
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
ITD122	Computer Applications for Professionals^■	3	ITD100 or Proficiency
MTH118	Quantitative Reasoning^	<u>3</u>	Pre/Co-MTH018 or MTH022 or MTH023 or Proficiency
		16	
Second Semester			
CUL123	Fundamental Cooking – Preparation I	3	CUL122
CUL226	Pantry and Garde Manger	3	CUL122
CUL126	Food Purchasing – Inventory Control	3	CUL122 and ITD122
PHL122	Ethics	3	
BUS121	Business Administration	3	IDS102 or Proficiency
or ENERGO	or	or	or
ENT120	Entrepreneurship^	<u>3</u>	IDS102 or Proficiency
Tl::.1 C		15	
Third Semester CUL124	M ( 15'1 D (' H	2	CHI 122
CUL221	Meat and Fish – Preparation II	3 3	CUL123 CUL122 and ITD122
	Baking and Pastry – Preparation III		
CUL125	Culinary Nutrition/Menu Planning	3	CUL119 and CUL120
MGT121	Principles of Management	3	BUS121 or ENT120
CUL223	Catering, Beverage and Food Services	<u>3</u>	CUL122
F 410		15	
Fourth Semester FIN110	Personal Finance	2	
		2	CLH 222
CUL230	Culinary Practicum	5	pre-co-CUL222
CUL222	Advanced Cookery – Preparation IV	3	pre-co-CUL124
SOC225	Diversity in American Society^	3	IDS102 or proficiency
CUL225	Advanced Portfolio Management	<u>3</u>	CUL124 and CUL221
		16	
	TOTAL CREDITS	62	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>■</sup>Successful completion of ITD102, ITD104, ITD105, and ITD106 may be substituted for ITD122



# career community:

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. 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.



## ASSOCIATE OF APPLIED SCIENCE

## **EARLY CHILDHOOD EDUCATION**

2024-25 Catalog

Effective Summer 2024

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Arts and Sciences Division

Communication, Humanities, Reading, Education, and American Sign Language Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EDU122	Curriculum Design and Instruction++ ▲+ (10 O.H.)	3	EDU131	
EDU123	Health, Safety, and Nutrition (5 O.H.)	2	EDU121, EDU130, or EDU131	
EDU124	Infant Toddler Curriculum++ (5 O.H.)	3	EDU131	
EDU126	Educational Technology	3		
or EDU224 or	or Early Childhood Program Administration	or 3 or	EDU121 or EDU130	
EDU228	Phonics for Young Children ▲+++	3	EDU221 or EDU130	
EDU131	Child Development^++ (10 O.H.)	3	ENG011 or Proficiency	
EDU132	Observation, Assessment, and Group Management^++ (10 O.H.)	3	ENG011 or Proficiency	
EDU221	Language Arts++ ▲- (5 O.H.)	3	EDU122, EDU124 or EDU130	
EDU223	Community and Family-based Programs++ (5 O.H.)	3	EDU121 or EDU130	
EDU232	Literature Across the Curriculum++ ▲- (5 O.H.)	3	EDU122 or EDU130	
EDU235	Inclusive Classrooms for Young Children ++ (5 O.H.)	3	EDU225	
EDU227	Early Childhood Education Practicum & Seminar++▲+ (210 Hours)	3	(EDU124 or EDU232) and EDU132 and EDU221 and EDU235	
	Total	32		
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	Diversity in American Society	3	IDS102 or Proficiency	
PHL122	Ethics	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or MTH124	or Statistics^Ω	or 3	Check for prerequisites	
COM121	Effective Speaking	3		
EDU121	Introduction to Early Childhood Education^++ (30 O.H.)	3	ENG011 or Proficiency	
EDU225	The Exceptional Child++	3	EDU121, EDU130, or EDU131	
	Educational Psychology++	3	EDU130 or EDU131	
EDU229	Eddeditional 1 Sychology			+
EDU229	Select one (1) Natural Sciences (with lab) Electives from the list below <sup>1</sup>	4	Check for prerequisites	
EDU229	Select one (1) Natural Sciences (with lab) Electives from	32	Check for prerequisites	

See footnotes on next page

2024-25 Catalog

### **EARLY CHILDHOOD EDUCATION**

### 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

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
EDU131	Child Development^++ (10 O.H.)	3	ENG011 or Proficiency
EDU132	Observation, Assessment, and Group	3	ENG011 or Proficiency
ENG124	Management^++ (10 O.H.) College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MTH118	Quantitative Reasoning^	3	of Frenciency
or	or	or	Check for prerequisites
MTH124	Statistics $^{}\Omega$		
PSY121	General Psychology <sup>^</sup>	3 3	IDS102 or Proficiency
151121	General 1 sychology	16	1D3102 of 1 tofferency
Second Semester		10	
EDU121	Introduction to Early Childhood Education^++ (30 O.H.)	3	ENG011 or Proficiency
EDU122	Curriculum Design and Instruction++ ▲+ (10 O.H.)	3	EDU131
EDU123	Health, Safety, and Nutrition (5 O.H.)	2	EDU121, EDU130, <b>or</b> EDU131
EDU124	Infant Toddler Curriculum++ (5 O.H.)	3	EDU131
EDU225	The Exceptional Child++	3	EDU121, EDU130, or EDU131
COM121	Effective Speaking	<u>3</u>	
	1 0	<u>-</u>	
Third Semester			
EDU221	Language Arts++ ▲- (5 O.H.)	3	EDU122 or EDU124 or EDU130
EDU223	Community and Family-based Programs++ (5 O.H.)	3	EDU121 or EDU130
SOC225	Diversity in American Society++	3	IDS102 or Proficiency
EDU232	Literature Across the Curriculum++ ▲- (5 O.H.)	3	EDU122 or EDU130
EDU235	Inclusive Classrooms for Young Children++ (5	3	EDU225
	O.H.)	<del></del>	
		15	
Fourth Semester			
EDU227	Early Childhood Education Practicum & Seminar++ (210 Hours)	3	(EDU124 or EDU232) and EDU132 and EDU221 and EDU235
EDU229	Educational Psychology++	3	EDU130 <b>or</b> EDU131
PHL122	Ethics	3	22 0 12 0 31 22 0 12 1
EDU Choice <sup>2</sup>		3	Check for prerequisites
	(with lab) Elective <sup>1</sup>	<u>4</u>	Check for prerequisites
	,	16	J. T. T.
	TOTAL CREDITS	64	

<sup>^</sup>Based on SSC placement scores.

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

<sup>++</sup>Minimum grade of "C" required.

ΩMTH124 should only be taken by students planning to transfer to a four-year institution.

<sup>&</sup>lt;sup>1</sup>Natural Science elective: BIO126, BIO127, CHM100, GEO141, PHY105

<sup>&</sup>lt;sup>2</sup>Education Choice: EDU126, EDU224, or EDU228++

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

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.



## ASSOCIATE OF SCIENCE

## **EDUCATION**

2024-25 Catalog
Effective Summer 2024

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Arts and Sciences Division

Communication, Humanities, Reading, Education, and American Sign Language Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPE	ERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
EDUCATION: 12	credit hours required		, and the second	
EDU126	Educational Technology	3		
EDU130	Introduction to the Teaching Profession^++	3	ENG011 or Proficiency	
EDU225	The Exceptional Child++	3	EDU121, EDU130, or EDU131	
EDU229	Educational Psychology++	3	EDU130 or EDU131	
ENGLISH COMPO	OSITION AND ORAL COMMUNICATIONS: 9	credit hours min	imum	
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG231	College Composition II (required)	3	ENG124	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
COM121	Effective Speaking (required)	3		
COM122	Interpersonal Communication	3		
SOCIAL AND BEH	IAVIORAL SCIENCES: 9 credit hours minimum	n		
PSC121	U.S. Government and Politics	3		
SOC121	Sociology^ (required)	3	IDS102 or Proficiency	
SOC225	Diversity in American Society-(required)	3	IDS102 or Proficiency	
PSY121	General Psychology <sup>^</sup> (required)	3	IDS102 or Proficiency	
PSY123	Human Growth and Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY221	Abnormal Psychology	3	PSY121	
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
BUS122	Basic Economics^	3	IDS102 or Proficiency	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
	NITIES: 6 credit hours minimum (across two dis	<u> </u>		
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Lit: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
ENG239	Film Appreciation ▲+	3	ENG124	
ENG240	Women's Literature▲-	3	ENG124	
ENG241	Major Modern Writers ▲+	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
HIS221	World Civilization to 17 <sup>th</sup> Century	3		
HIS222	World Civilization from 17th Century	3		
PHL122	Ethics	3		

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Course Number	Course Title	Credits	Pre- and Co-Requisites Comple Sem./Yo	
NATURAL SCIENCES	8: 8 semester credit hours minimum (1 lab course r	required)		
BIO121	Anatomy and Physiology I (lab)^▲	4	BIO101 or Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123	
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		
BIO221	Principles of Microbiology (lab)	4	BIO122, or BIO123, or BIO127, or BIO141	
BIO241	General Genetics (lab)	4	BIO141	
BIO242	Cell & Molecular Biology (lab) ▲+	4	BIO141	
CHM100	Exploring Science and Technology (lab)	4	Bio i ii	
CHM101	Introduction to Chemistry^ \_	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107 or Proficiency	
СНМ123	General, Organic, and Biological Chemistry (lab)	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 or (CHM101 or Proficiency)	
CHM141	General Chemistry I (lab)	5	CHM101 or Proficiency	
CHM142	General Chemistry II (lab)	5	CHM141	
CHM205	Forensic Chemistry (lab)	4	CHM105 or CHM121 or CHM141	
GEO141	Physical Geology (lab)	4		
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	
PHY105	Astronomy (lab)	4		
PHY121	College Physics I with Algebra (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
MATHEMATICS, STA	ATISTICS, AND LOGIC: 3-4 semester credit hou	rs minimum		
MTH118	Quantitative Reasoning	3	Pre-Co-MTH118 or MTH022 or Proficiency	
MTH124	Statistics^	3	MTH022 <b>or</b> Pre-Co-MTH024 <b>or</b> Proficiency	
MTH125	College Algebra^	4	MTH023 or Pre-Co-MTH025 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	MTH025 or Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
ADDITIONAL ELECT	IVES TO COMPLETE DEGREE*	8-17	Check for prerequisites	
	TOTAL CREDIT HOURS	60-65		

See footnotes on last page

### **EDUCATION**

1060

#### 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.

See footnotes on last page

ADDITIONAL EDUCATION, LIBERA	L ARTS, MATH AND SCIENCE COURSES*
Biology	Early Childhood Education and Intervention Specialist
BIO101 Introduction to Anatomy and Physiology (3)	EDU121 Intro to Early Childhood Education (3)^+++
BIO123 Principles of Human Structure and Function (lab) (5)	EDU122 Curriculum Design and Instruction (3) ▲++
BIO124 Human Diseases (3)	EDU123 Health, Safety, and Nutrition (2)
BIO128 Climate Studies (lab) ▲+(3)	EDU131 Child Development (3)^++
BIO129 Meteorology (lab) (3)	EDU132 Observation, Assessment, and Group Management (3)^++
BIO130 Ocean Studies (lab) ▲ - (3)	EDU221 Language Arts (3) ▲-++
	EDU223 Community and Family-based Programs (3)++
Chemistry	EDU224 Early Childhood Program Administration (3)
CHM105 Introduction to Forensic Science (lab) (3)	EDU227 Early Childhood Education Practicum and Seminar (3)++ \( \text{\$\times} + (210 \text{ Hours}) \)
	EDU228 Phonics for Young Children (3)▲+++
Deaf Education	EDU232 Literature Across the Curriculum (3)▲-++
ASL121 Introduction to the Deaf Culture and Community (3)	EDU235 Inclusive Classrooms for Young Children (3)++
ASL122 American Sign Language I (4)	
ASL123 Introduction to Interpreting (3)	English Composition and Oral Communication
ASL124 American Sign Language II (4)	ENG125 Technical Editing and Layout (3)▲+
ASL221 American Sign Language III (4)	ENG227 Writing for Media (3)
ASL222 ASL Practicum and Seminar (3)	ENG228 Writing for the Web (3)▲-
	ENG229 Grant Writing (3)
Foreign Language	ENG235 Introduction to Shakespeare (3)▲+
SPN100 Elementary Spanish I (4)	ENG238 Introduction to Creative Writing (3)▲+
SPN200 Elementary Spanish II (4)▲+	COM123 Small Group Communication (3)
	COM125 Introduction to Communication Theory ▲ -(3)
Social and Behavioral Sciences	COM126 Introduction to Mass Communication ▲+(3)
PSC122 Introduction to Law and the Legal System (3)	
PSC221 State and Local Government (3)	Experiential Learning
PSC222 Public Policy (3)	SSC201 Study Away: Experiential Learning (1)
SOC221 Social Problems (3	
SOC222 Juvenile Delinquency (3)	

#### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011
			or Proficiency
SOC121	Sociology^	3	IDS102 or Proficiency
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
COM121	Effective Speaking	3	
EDU130	Introduction to the Teaching Profession^++	<u>3</u> 16	ENG011 or Proficiency
		16	
Second Semester			
Mathematics, Sta	tistics, and Logic Elective <sup>3</sup>	3-4	Check for prerequisites
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency
ENG231	College Composition II	3	ENG124
EDU126	Educational Technology	3	
Additional Electi	ve*	<u>3</u>	Check for prerequisites
		15-16	
Third Semester			
Arts and Humani	ties Elective <sup>1</sup>	3	Check for prerequisites
BIO127	Human Biology (lab)	4	v 1
EDU229	Educational Psychology++	3	EDU130 or EDU131
Additional Electi	ve*	3-5	Check for prerequisites
Additional Electi	ve*	<u>3</u>	Check for prerequisites
		16-18	
Fourth Semester			
Arts and Humani	ties Elective <sup>1</sup>	3	Check for prerequisites
EDU225	The Exceptional Child++	3	EDU121, EDU130, or EDU131
Natural Science	Elective ♣ <sup>2</sup>	4	Check for prerequisites
Additional Electi	ve*	<u>3-5</u>	Check for prerequisites
		13-15	
	TOTAL CREDITS	60-65	

<sup>^</sup>Based on SSC placement scores.

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

<sup>++</sup>Minimum grade of "C" required.

<sup>▲</sup> 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.

<sup>&</sup>lt;sup>1</sup> <u>Arts and Humanities Elective</u>s: ENG233, ENG234, ENG236, ENG237, ENG239, ENG240, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

<sup>&</sup>lt;sup>2</sup> <u>Natural Science Electives</u>: BIO121, BIO122, BIO126, BIO127, BIO141, BIO142, BIO221, BIO241, BIO242, CHM100, CHM101, CHM123, CHM141, CHM142, CHM205, GEO141, PHY101, PHY105, PHY121, PHY122

<sup>&</sup>lt;sup>3</sup> Mathematics, Statistics, and Logic Electives: MTH118, MTH124, MTH125, MTH135, MTH223

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

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



### ONE-YEAR CERTIFICATE

### **AMERICAN SIGN LANGUAGE**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

1075

Arts and Sciences Division

Communication, Humanities, Reading, Education, and American Sign Language Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ASL121	Introduction to the Deaf Culture and Community++ (5 O.H.)	3		
ASL122	American Sign Language I++ (10 O.H.)	4		
ASL123	Introduction to Interpreting++ (5 O.H.)	3		
ASL124	American Sign Language II++ (10 O.H.)	4	ASL122 or Proficiency	
ASL221	American Sign Language III++ (10 O.H.)	4	ASL124	
ASL222	American Sign Language Practicum/Seminar++ (210 Hours)	3	ASL123 and Pre-Co- ASL221	
	Total	21		
NON-TECH	Course Title	Credits	Pre- and Co-Requisites	Completed
Course Number	Course Title	Credits	rre- and Co-Requisites	Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
			•	
SSC101	Student Success Seminar^^	1	Take first semester  Co-ENG024 or Co-ENG011	
SSC101 ENG124	Student Success Seminar^^  College Composition^	3	Take first semester  Co-ENG024 or Co-ENG011	
SSC101 ENG124 COM121	Student Success Seminar^^  College Composition^  Effective Speaking	3 3	Take first semester  Co-ENG024 or Co-ENG011 or Proficiency	
SSC101 ENG124 COM121 PSY121	Student Success Seminar^^  College Composition^  Effective Speaking  General Psychology^	1 3 3 3	Take first semester  Co-ENG024 or Co-ENG011 or Proficiency	

<sup>^</sup>Based on SSC placement scores.

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

Students completing this certificate may be eligible to also receive an ASL Career Enhancement Certificate (1074).

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

<sup>++</sup>Minimum grade of "C" required.

Effective Summer 2024

# ONE-YEAR CERTIFICATE AMERICAN SIGN LANGUAGE

1075

#### 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 students seeking a one-year certificate.

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.)	4	
COM121	Effective Speaking	<u>3</u>	
	•	11	
Second Semeste	<u>r</u>		
ASL124	American Sign Language II++ (10 O.H.)	4	ASL122 or Proficiency
ASL123	Introduction to Interpreting++ (5 O.H.)	3	•
ENG124	College Composition^	3	Co-ENG024 or Co-
			ENG011 or Proficiency
PSY121	General Psychology <sup>^</sup>	3 13	IDS102 or Proficiency
		13	
Third Semester			
ASL221	American Sign Language III++ (10 O.H.)	4	ASL124
ASL222	American Sign Language Practicum/Seminar++ (210 Hours)	3	ASL123 and Pre-Co-
			ASL221
SOC123	Dynamics of the Family	<u>3</u>	
		10	
	TOTAL CREDITS	34	

<sup>^</sup>Based on SSC placement scores.

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

Students completing this certificate may be eligible to also receive an ASL Career Enhancement Certificate (1074).

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

<sup>++</sup>Minimum grade of "C" required.



#### CAREER ENHANCEMENT CERTIFICATE

### **AMERICAN SIGN LANGUAGE**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog**Effective Summer 2024

1074

Arts and Sciences Division

Communication, Humanities, Reading, Education, and American Sign Language Department

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.)	4		
ASL124	American Sign Language II++ (10 O.H.)	4	ASL122 or Proficiency	
ASL221	American Sign Language III++ (10 O.H.)	4	ASL124	
	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
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.)	<u>4</u>	
		7	
Second Semester			
ASL124	American Sign Language II++ (10 O.H.)	<u>4</u>	ASL122 or Proficiency
		4	
Third Semester			
ASL221	American Sign Language III++ (10 O.H.)	<u>4</u>	ASL 124
		4	
	TOTAL CREDITS	16	

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

**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.

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.

<sup>++</sup>Minimum grade of "C" required.



### career community:

engineering technologies, industrial, advanced manufacturing and automotive 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. 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.



### ASSOCIATE OF APPLIED SCIENCE

### **AUTOMOTIVE TECHNOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog**Effective Summer 2024

2250

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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	
	See Technical Elective list page**	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 1	3	AUT121	
AUT226	Automotive Drivetrain 2	3	AUT121	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH107	Industrial Math^	3		
or MTH125	or Callers AlaskarO	or 4	Check for prerequisites	
BUS122	College AlgebraΩ  Basic Economics^	3	IDS102 or Proficiency	
PHL122	Ethics	3	1D5102 of 11011clclicy	
11111122	Total	30		
	TOTAL CREDIT HOURS	60-64		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH125 College Algebra should be taken by students planning to transfer to a four-year university

<sup>\*\*</sup>See Technical Elective list page.

#### 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

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
MTH107	Industrial Math^	3	
or	or	or	Check for prerequisites
MTH125	College AlgebraΩ	<u>4</u>	
		14-15	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
AUT126	Automotive HVAC Systems	2	AUT121
BUS122	Basic Economics^	3	IDS102 or Proficiency
ENG124	College Composition <sup>^</sup>	<u>3</u>	Co-ENG024 or Co-ENG011 or
			Proficiency
TTI: 1.0		16	
Third Semester		2	A I VID 10.5
AUT222	Engine Systems Performance Diagnosis	3	AUT125
AUT223	Advanced Automotive Electronics	3	AUT125
AUT225	Automotive Drivetrain 1	3	AUT121
AUT226	Automotive Drivetrain 2	3	AUT121
ENG221	Technical Report Writing	3	ENG124
		15	
Fourth Semester			
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT227	Computerized Vehicle Control	3	AUT125
AUT233	Automotive Diagnostic Applications	2	AUT223
AUT234	Alternative Fuels and Advanced Automotive Technology	2	AUT223
PHL122	Ethics	3	
	See Technical Elective list page**	<u>2-5</u>	Check for prerequisites
		15-18	
	TOTAL CREDITS	60-64	

<sup>^</sup>Based upon SSC placement score

<sup>^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH125 College Algebra should be taken by students planning to transfer to a four-year university

<sup>\*\*</sup>See Technical Elective list page.

### **AUTOMOTIVE TECHNOLOGY**

2250

TECHNICAL ELECTIVES: Two (2) credit hours minimum				225 Complete
Course Number	Course Title	Credits	Pre- and Co-Requisites	Sem./Yea
AUT128	Automotive Diesel Engine Performance	2		
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	Steering, Suspension, and Braking Operations	2		
AUT142	Auto Electrical Systems Toyota	2		
AUT143	Ventilation and Air Conditioning for Light Vehicles	1		
AUT253	Computerized Engine Control Systems	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	Introduction to CAT Lift Trucks	1	AUT121	
AUT182	CAT Operator Safety Training	1	AUT121	1
AUT183	CAT Service Information System	1	AUT121	1
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	1
AUT188	CAT Steering Systems	1	AUT121	1
AUT189	CAT Braking Systems	1	AUT121	
AUT281	CAT Differentials and Front Axles	1	AUT121	1
AUT282	CAT Transmissions	2	AUT121	
AUT283	CAT Fuel Systems (LP, Gasoline)	2	AUT121	
AUT254	Automotive Aftermarket Vehicle Interior Modifications	3	AUT125	1
AUT255	Automotive Aftermarket Vehicle Exterior Modifications	3	AUT125	1
AUT256	Automotive Aftermarket Vehicle Powertrain Modifications	3	AUT123 AUT123	1
AUT257	Automotive Aftermarket Vehicle Chassis Modifications	3	AUT124	
AUT191	Automotive CO-OP 1	2	AU1127	1
AUT191 AUT192	Automotive CO-OP 1 Automotive CO-OP 2	2		1
AUT192 AUT193	Automotive CO-OP 2 Automotive CO-OP 3	2		1
AUT193 AUT194	Automotive CO-OP 3 Automotive CO-OP 4			1
	Automotive CO-OP 4 Automotive Diesel Systems	2 2	ATTT 121	1
AUT 224	,		AUT 121	1
AUT228 AUT230	Auto Service Management Technical Project	2 2		1
TOY101	Introduction to Toyota T-TEN			1
	Toyota Electrical Systems I	3	TOV101	1
TOY102		5	TOY101	1
TOY103	Toyota Steering, Suspension, and Handling	5	TOY102	1
TOY104	Toyota Engine Diagnosis and Repair	5	TOY101	1
TOY105	Toyota Engine Controls I	5	TOY104	
TOY106	Toyota Manual Transmissions and Drivetrains	5	TOY102	1
TOY201	Toyota Electrical Systems II	5	TOY102	1
TOY202	Toyota Automotive Braking Systems	5	TOY201	1
TOY203	Toyota HVAC Systems	5	TOY201	
TOY204	Toyota Engine Controls II	5	TOY105	
TOY205	Toyota Automatic Transmissions	5	TOY204	



### ASSOCIATE OF APPLIED SCIENCE

### **GENERAL MOTORS ASEP PROGRAM**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog**Effective Summer 2024

2251

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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		
AUT194	Automotive CO-OP 4	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	
AUT121	Automotive Technical Skills	2		
AUT123	Engine Diagnosis and Major Service	4	AUT121	
AUT126	Automotive HVAC Systems	2	AUT121	
AUT225	Automotive Drivetrain 1	3	AUT121	
AUT226	Automotive Drivetrain 2	3	AUT121	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH107	Industrial Math^	3		
or MTH125	<b>or</b> College AlgebraΩ	or 4	Check for prerequisites	
BUS122	Basic Economics^	3	IDS102 or Proficiency	
PHL122	Ethics	3		
	Total	30		
	TOTAL CREDIT HOURS	62-63		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH 125 College Algebra should be taken by students planning to transfer to a four-year university.

2251

Effective Summer 2024

#### 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

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
AUT191	Automotive CO-OP 1	2	
MTH107	Industrial Math^	3	
or	or	or	Check for prerequisites
MTH125	College Algebra $\Omega$	4	
		12-13	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
AUT192	Automotive CO-OP 2	2	
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
		13	•
Summer Semester			
AUT123	Engine Diagnosis and Major Service	4	AUT121
AUT126	Automotive HVAC Systems	2	AUT121
BUS122	Basic Economics^	<u>3</u>	IDS102 or Proficiency
		9	
Third Semester			
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT222	Engine Systems Performance Diagnosis	3	AUT125
AUT223	Advanced Automotive Electronics	3	AUT125
AUT193	Automotive CO-OP 3	2	
ENG221	Technical Report Writing	<u>3</u>	ENG124
		14	
<b>Fourth Semester</b>			
AUT227	Computerized Vehicle Control	3	AUT125
AUT225	Automotive Drivetrain 1	3	AUT121
AUT226	Automotive Drivetrain 2	3	AUT121
AUT194	Automotive CO-OP 4	2	
PHL122	Ethics	<u>3</u>	
		14	
	TOTAL CREDITS	62-63	

<sup>^</sup>Based upon SSC placement score

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>+</sup>Minimum grade of "B" required

 $<sup>\</sup>Omega$  MTH 125 College Algebra should be taken by students planning to transfer to a four-year university.



## ONE-YEAR CERTIFICATE

1-YEAR AUTOMOTIVE TECHNOLOGY

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog**Effective Summer 2024

2256

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

The Stark State College *I-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 choose to add the academic courses that are listed on the Automotive Technology Program (2250) advising sheet.

TECHNICAL 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 1	3	AUT121	
AUT226	Automotive Drivetrain 2	3	AUT121	
AUT227	Computerized Vehicle Control	3	AUT125	
AUT233	Automotive Diagnostic Applications	2	AUT223	
	TOTAL CREDIT HOURS	41		

<sup>^^</sup>To promote student success, this course should be taken in the first semester

#### **ONE-YEAR CERTIFICATE**

### **1-YEAR AUTOMOTIVE TECHNOLOGY**

2256

#### 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 students seeking a one-year certificate.

<u>First Semester</u>		Credit Hours	Pre- or 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	<u>4</u>	AUT121
		15	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT126	Automotive HVAC Systems	2	AUT121
AUT223	Advanced Automotive Electronics	3	AUT125
AUT225	Automotive Drivetrain 1	3	AUT121
AUT226	Automotive Drivetrain 2	3	AUT121
		15	
Third Semester			
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT222	Engine System Performance Diagnosis	3	AUT125
AUT227	Computerized Vehicle Control	<u>3</u>	AUT125
AUT233	Automotive Diagnostic Applications	<u>2</u>	AUT223
		11	
	TOTAL CREDITS	41	

<sup>^^</sup>To promote student success, this course should be taken in the first semester

# Stark State COLLEGE MY ACADEMIC PLAN

#### **ONE-YEAR CERTIFICATE**

# COMPREHENSIVE AUTOMOTIVE TECHNOLOGY CERTIFICATE

**2024-25 Catalog** 

Effective Summer 2024

2257

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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 choose 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	
AUT234	Alternative Fuels and Advanced Automotive Technologies	2	AUT223	
	TOTAL CREDIT HOURS	43		

#### **2024-25 Catalog**

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#### **ONE-YEAR CERTIFICATE**

# COMPREHENSIVE AUTOMOTIVE TECHNOLOGY CERTIFICATE

2257

#### STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor 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
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	<u>4</u>	AUT121
		11	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
AUT126	Automotive HVAC Systems	<u>2</u>	AUT121
		10	
Third Semester			
AUT222	Engine System Performance Diagnosis	3	AUT125
AUT223	Advanced Automotive Electronics	3	AUT125
AUT225	Automotive Drivetrain I	3	AUT121
AUT226	Automotive Drivetrain II	<u>3</u>	AUT121
		12	
Fourth Semester			
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT227	Computerized Vehicle Control	3	AUT125
AUT233	Automotive Diagnostic Applications	2	AUT223
AUT234	Alternative Fuels and Advanced Automotive Technologies	<u>2</u>	AUT223
		10	
	TOTAL CREDITS	43	

 $<sup>{}^{\</sup>wedge\!\!}$  To promote student success, this course should be taken in the first semester.

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



### ASSOCIATE OF APPLIED SCIENCE

### **MECHANICAL ENGINEERING TECHNOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

2024-25 Catalog
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Business, Engineering, and Information Technologies Division

Engineering Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET121	Engineering Drawing	3		
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
MET222	Fluid Power	4	MET124	
MET223	Dynamics	2	MET124	
MET225	Manufacturing Processes	3		
or AIT122	or Machine Tools	or 4		
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125	
MET227	Thermodynamics and Heat Transfer	3	PHY121	
MET228	Machine Design	4	MET124	
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or MTH107	
	Total	31-32		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
DET125	Basic AutoCAD	3		
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125	
ENG124	College Composition^	3	Co-ENG024 or Co- ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MET123	Material Science	3		
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	31		
	TOTAL CREDIT HOURS	62-63		

<sup>^</sup>Based on SSC placement scores

Students completing this degree may be eligible to also receive a Mechanical Engineering Technology – Machine Design Career Enhancement Certificate (4056 and a Mechanical Engineering Technology – Mechanical Power Career Enhancement Certificate (4057).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Effective Summer 2024

#### 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

First Semester		<u>Credit</u> <u>Hours</u>	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
DET121	Engineering Drawing	3	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MET123	Material Science	3	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
		18	
Second Semester			
DET125	Basic AutoCAD	3	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221
MET225	Manufacturing Processes	3	
or AIT122	<b>or</b> Machine Tools	<b>or</b> 4	
PHY121	College Physics I with Algebra (lab)^	<u>4</u>	MTH135 or (MTH125 and MTH130) or Proficiency
		14-15	,
Third Semester			
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125
MET221	Advanced Strength of Materials	2	MET124
MET222	Fluid Power	4	MET124
MET228	Machine Design	<u>4</u>	MET124
		13	
Fourth Semester			(MTH027 P (° '
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) <b>or</b> MTH107
MET223	Dynamics	2	MET124
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125
MET227	Thermodynamics and Heat Transfer	3	PHY121
ENG221	Technical Report Writing	3	ENG124
Arts & Humanities	Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		17	
1 000 1	TOTAL CREDITS	62-63	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

# Stark State

#### ASSOCIATE OF APPLIED SCIENCE

#### **2024-25 Catalog**

Effective Summer 2024

4058

# MECHANICAL ENGINEERING TECHNOLOGY - DESIGN MAJOR



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET121	Engineering Drawing	3		
DET124	Working Drawings	3	DET121 and Co-DET125	
MET223	Dynamics	2	MET124	
DET226	Geometric Dimensioning and Tolerancing	2	DET124	
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 and Pre- Co-DET125	
MET225 or AIT122	Manufacturing Processes  or  Machine Tools	3 <b>or</b> 4		
MET228	Machine Design	4	MET124	
DET126	Customizing AutoCAD	3	DET125	
DET120	AutoCAD Inventor with 3D Printing and Scanning	3	DET125	
DET131	Pro/ENGINEER (Creo Parametric)	3	DET125	
DET132	SolidWorks with 3D Printing and Scanning	3	DET125	
	Total	31-32		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
DET125	Basic AutoCAD	3		
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MET123	Material Science	3		
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co- ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	Check for prerequisites	
	Total	32		
	TOTAL CREDIT HOURS	63-64		

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Effective Summer 2024

# MECHANICAL ENGINEERING TECHNOLOGY – DESIGN MAJOR

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#### 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.

Chadit

<u>First Semester</u>		<u>Credit</u> <u>Hours</u>	<u>Pre- or Co-requisites</u>
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
DET125	Basic AutoCAD	<u>3</u>	
		15	
Second Semester			
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125
DET121	Engineering Drawing	3	
PHY121	College Physics I with Algebra (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221
DET126	Customizing AutoCAD	<u>3</u>	DET125
		17	
Third Semester			
DET124	Working Drawings	3	DET121 and Co-DET125
MET123	Material Science	3	
MET225	Manufacturing Processes	3	
or AIT122	or Machine Tools	or 4	
DET132	SolidWorks with 3D Printing and Scanning	3	DET125
MET223	Dynamics	<u>2</u>	MET124
	_ ,	<u>=</u> 14-15	
Fourth Semester			
DET131	Pro/ENGINEER (Creo Parametric)	3	DET125
MET226	, ,	2	Pre-Co-MET228 and
	Technical Project - Mechanical and Design		Pre-Co-DET125
MET228	Machine Design	4	MET124
ENG221	Technical Report Writing	3	ENG124
Arts & Humanities Ele	ective <sup>1</sup>	3	Check for prerequisites
DET226	Geometric Dimensioning and Tolerancing	<u>2</u>	DET124
		17	
	TOTAL CREDITS	63-64	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122



#### ASSOCIATE OF SCIENCE

# PRE-ENGINEERING – MECHANICAL ENGINEERING

2024-25 Catalog

Effective Summer 2024

4054



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

## ARTICULATING TO A BS IN MECHANICAL ENGINEERING WITH THE UNIVERSITY OF AKRON and UNIVERSITY OF MOUNT UNION

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
FRESHMAN EXPERIENCE						
SSC101	Student Success Seminar^^	1	Take first semester			
ENGLISH COMP	OSITION & ORAL COMMUNICATION					
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency			
SOCIAL & BEHA	AVIORAL SCIENCES					
BUS221	Microeconomics^	3	IDS102 or Proficiency			
SOC225	Diversity in American Society^	3	IDS102 or Proficiency			
ARTS & HUMAN	HITIES					
HIS122	U.S. History II from 1877	3				
PHL122	Ethics	3				
NATURAL SCIE	NCES					
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)			
CHM142	General Chemistry II (lab)	5	CHM141			
MATHEMATICS	, STATISTICS AND LOGIC					
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 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	ON CORE		<u> </u>			
MTH225	Analytical Geometry and Calculus III	4	MTH224			
PHY221	General Physics I w/Calculus (lab)	5	Pre-Co-MTH223 and MTH224			
CST121	Modeling and Simulation	3	MTH221 or MTH223			
DET125	Basic AutoCAD	3				
MET123	Material Science	3				
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221			
MET221	Advanced Strength of Materials	2	MET124			
	TOTAL CREDIT HOURS	63				

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> 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 test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

#### **2024-25 Catalog**

Effective Summer 2024

# PRE-ENGINEERING – MECHANICAL ENGINEERING

4054

#### 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

<u>First Semester</u> <u>Cree</u>		<u>Pre- or Co-requisites</u>
SSC101 Student Success Seminar^^	1	Take first semester
CHM141 General Chemistry I (lab) <sup>∧</sup> ▲	5	(CHM101 or Proficiency) or
		(MTH024 or MTH025 or Proficiency)
ENG124 College Composition^	3	Co-ENG024 or Co-ENG011 or
		Proficiency
MTH135 Precalculus^ – A student may take MTH125 (College	<u>5</u>	MTH025 or Proficiency
Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.		
semesters to satisfy this requirement.	14	
Second Semester		
PHL122 Ethics	3	
SOC225 Diversity in American Society^	3	IDS102 or Proficiency
MTH223 Analytical Geometry and Calculus 1^*	4	MTH135 or (MTH125 and
•		MTH130) or Proficiency
CHM142 General Chemistry II (lab)	<u>5</u>	CHM141
	15	
Summer Semester		
MTH224 Analytical Geometry and Calculus II	4	MTH223
TIL 10		
Third Semester PHY221 General Physics I w/Calculus (lab)	5	Dec Co MTH222 and MTH224
PHY221 General Physics I w/Calculus (lab) MTH225 Analytical Geometry and Calculus III	5 4	Pre-Co-MTH223 and MTH224 MTH224
MET124 Statics and Strength of Materials	4	Pre-Co-PHY121 or
ME1124 Statics and Strength of Materials	4	Pre-Co-PHY221
BUS221 Microeconomics^	<u>3</u>	IDS102 or Proficiency
NileTocconomics	<u>5</u> 16	1DS102 of Tronciency
Fourth Semester	10	
CST121 Modeling and Simulation	3	MTH221 or MTH223
MET221 Advanced Strength of Materials	2	MET124
MET123 Material Science	3	
HIS122 U.S. History II from 1877	3	
DET125 Basic AutoCAD	<u>3</u>	
	14	
TOTAL CREDITS	63	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> 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.

<sup>\*</sup>Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

#### **2024-25 Catalog**

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# PRE-ENGINEERING – MECHANICAL ENGINEERING

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#### **The University of Akron**

#### Elective Additional Credit

Bridge courses that can be taken at Stark State College, prior to attending The University of Akron, that apply towards The University of Akron BS Degree: COM121 Effective Speaking, ENG221 Technical Report Writing, PHY222 General Physics II w/Calculus, and MTH227 Ordinary Differential Equations. If you plan on taking additional courses at Stark State College beyond this list, we recommend you verify transferability with a University of Akron advisor prior to taking the course. 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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. Contact The University of Akron's Transfer Student Services Center (330-972-7009) during the first semester to discuss junior year Stark State College Associate of Science pre-engineering transition strategies to The University of Akron's Engineering BS programs.

#### **University of Mount Union**

#### Summer 2

After completing the Pre-Engineering Program at Stark State College it is expected that you complete the Thermal Science (2 credits) and Fluid Mechanics I (2 credits) courses at the University of Mount Union to stay on track to complete the BS Degree in four years.

#### Elective Additional Credit

Bridge courses that can be taken at Stark State College, prior to attending the University of Mount Union, that apply towards the University of Mount Union's BS Degree: Foreign Language I, Foreign Language II, MET223 Dynamics, PHY222 General Physics II w/Calculus, and MTH227 Ordinary Differential Equations. If you plan on taking additional courses at Stark State College beyond this list, we recommend you verify transferability with a University of Mount Union advisor prior to taking the course. 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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. Contact the University of Mount Union's Transfer Student Services Center number (330-829-8238) during the first semester to discuss junior year Stark State College Associate of Science pre-engineering transition strategies to the University of Mount Union's Engineering BS programs.

#### Advising

You are highly encouraged to contact the Chair of the Department of Engineering at the University of Mount Union during your first year at Stark State for curricular advising to stay on track to graduate with BS degree in four years.



#### ASSOCIATE OF APPLIED SCIENCE

### 2024-25 Catalog

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incom to Summer 2021

### 4100

# ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY

MY ACADEMIC PLAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135) and EET120	
EET123	Electronic Devices and Circuits	4	EET120 and Pre-Co-EET122	
EET126	Electrical Machines	4	Pre-Co-EET122	
EET227	PLCs and Industrial Controls I	3	EET120 or EST230	
EET228	PLCs and Industrial Controls II	3	EET227	
EET232	Industrial Electronics	4	EET123 and EET227	
AIT139	Introduction to Robotics	2		
AIT220	Industrial Robotics	4		
EET233	Technical Project – Electrical/Electronic	1	EET123 and EET227	
	Total	33		
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)	
CSE233	C++ Programming	3	CSE122	
DET125	Basic AutoCAD	3		
EET128	NEC and Electrical Systems Design	2	EET122	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below. <sup>1</sup>	3	Check for prerequisites	
	Total	30		
	TOTAL CREDIT HOURS	63		

See back page for footnotes

Students completing this degree may be eligible to also receive a Electrical/Electronic Engineering Technology – Industrial Controls Career Enhancement Certificate (4409), an Industrial Technology – Automation and Robotics Specialist Career Enhancement Certificate (4554), an Electrical/Electronic Engineering Technology – Electrical/Electronic Troubleshooting Career Enhancement Certificate (4408), and an Electrical/Electronic Engineering Technology – Industrial Electricity and Electronics Career Enhancement Certificate (4410).

Effective Summer 2024

# ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY

4100

#### 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

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)
EET120	DC Cinnel Analonia	4	and (ITD100 or Proficiency) Pre-Co-MTH125 or
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>0r</b> Pre-Co-MTH135
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
		_	Proficiency
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry)	<u>5</u>	MTH025 or Proficiency
	over two semesters to satisfy this requirement.		
		16	
Second Semeste	<u>er</u>		
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135)
CSE233	C++ Programming	3	and EET120 CSE122
EET123	Electronic Devices and Circuits	4	EET120 and Pre-Co-EET122
PHY121	College Physics I with Algebra (lab)^	<u>4</u>	MTH135 or
1111121	Conege i nysies i with Angeora (lab)	<u> </u>	(MTH125 and MTH130) or Proficiency
		15	•
Third Semester			
DET125	Basic AutoCAD	3	
EET227	PLCs and Industrial Controls I	3	EET120 or EST230
ENG221	Technical Report Writing	3	ENG124
EET126	Electrical Machines	4	Pre-Co-EET122
Arts & Humanit		3	Check for prerequisites
AIT139	Introduction to Robotics	<u>2</u>	
		18	
Fourth Semester	_		
AIT220	Industrial Robotics	4	
EET228	PLCs and Industrial Controls II	3	EET227
EET128	NEC and Electrical Systems Design	2	EET122
EET232	Industrial Electronics	4	EET123 and EET227
EET233	Technical Project – Electrical/Electronic	<u>1</u>	EET123 and EET227
		14	
	TOTAL CREDITS	63	
AD1 CCC	la come out a cours		

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

# Stark State

#### ASSOCIATE OF APPLIED SCIENCE

### ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – ELECTRO-MECHANICAL MAJOR

**2024-25 Catalog** 

Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co- MTH135) and EET120	
EET123	Electronic Devices and Circuits	4	EET120 and Pre-Co-EET122	
EET126	Electrical Machines	4	Pre-Co-EET122	
EET227	PLCs and Industrial Controls I	3	EET120 or EST230	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221	
MET228	Machine Design	4	MET124	
MET226	Technical Project – Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125	
MET227	Thermodynamics and Heat Transfer	3	PHY121	
MET123	Material Science	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	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
DET125	Basic AutoCAD	3		
AIT139	Introduction to Robotics	2		
MET225	Manufacturing Processes	3		
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
	Select one (1) Arts & Humanities Elective from list below <sup>1</sup>	3	Check for pre-requisites	
	Total	30		
	TOTAL CREDIT HOURS	65		

<sup>^</sup>Based on SSC placement scores

Students completing this degree may be eligible to also receive an Electrical/Electronic Engineering Technology – Electrical/Electronic Troubleshooting Career Enhancement Certificate (4408).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Effective Summer 2024

# ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – ELECTRO-MECHANICAL MAJOR

4101

#### 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

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	Pre-Co-MTH125 or Pre-Co-MTH135
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	<u>5</u>	MTH025 or Proficiency
		16	
Second Semester			
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135) and EET120
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221
EET126	Electrical Machines	4	Pre-Co-EET122
PHY121	College Physics I with Algebra (lab)^	<u>4</u>	MTH135 <b>or</b> (MTH125 and MTH130) <b>or</b> Proficiency
		16	,
Third Semester			
MET227	Thermodynamics and Heat Transfer	3	PHY121
EET123	Electronic Devices and Circuits	4	EET120 and Pre- or Co-EET122
EET227	PLCs and Industrial Controls I	3	EET120 or EST230
MET123	Material Science	3	
ENG221	Technical Report Writing	3	ENG124
DET125	Basic AutoCAD	<u>3</u>	
		19	
Fourth Semester			
MET228	Machine Design	4	MET124
MET226	Technical Project – Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125
MET225	Manufacturing Processes	3	
AIT139	Introduction to Robotics	2	
Arts & Humanitie	es Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		14	
	TOTAL CREDITS	65	
AD 1 000 1			

 $<sup>^{\</sup>wedge}$ Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122



#### ASSOCIATE OF SCIENCE

# PRE-ENGINEERING – ELECTRICAL ENGINEERING

The catalog in force is assigned to students based on the academic year they first applied to the college, and

**2024-25 Catalog** 

Effective Summer 2024

4102



changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

## ARTICULATING TO A BS IN ELECTRICAL ENGINEERING WITH THE UNIVERSITY OF AKRON

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXI	PERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
ENGLISH COM	POSITION & ORAL COMMUNICATION			
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
SOCIAL & BEHA	AVIORAL SCIENCES			
BUS221	Microeconomics^	3	IDS102 or Proficiency	
SOC225	Diversity in American Society^	3	IDS102 or Proficiency	
ARTS & HUMAN	NITIES			
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
NATURAL SCIE	NCES			
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
PHY221	General Physics I w/Calculus (lab)	5	MTH223 and MTH224	
MATHEMATICS	S, STATISTICS AND LOGIC			
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 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	ON CORE			
MTH225	Analytical Geometry and Calculus III	4	MTH224	
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co- MTH135) and 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	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
	TOTAL CREDIT HOURS	64		

<sup>^</sup>Based on SSC placement scores

<sup>^</sup>To promote student success, this course should be taken in the first semester

A 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.

<sup>\*</sup>Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

Effective Summer 2024

# PRE-ENGINEERING – ELECTRICAL ENGINEERING

4102

#### 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 Stark State College, prior to attending the University of Akron, that apply towards the University of Akron BS Degree: COM121, ENG221, PHY222, MTH227 and CSE233. If you plan on taking additional courses at Stark State College beyond this list, we recommend you verify transferability with a University of Akron advisor prior to taking the course. 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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. Contact the University of Akron's Transfer Student Services Center (330-972-7009) during the first semester to discuss junior year Stark State College Associate of Science pre-engineering transition strategies to the University of Akron's Engineering BS programs.

First Semester		Credit Hours	<u>Pre- or Co-requisites</u>
SSC101	Student Success Seminar^^	1	Take first semester
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or
			(MTH024 or MTH025 or Proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
			Proficiency
MTH135	Precalculus^ – A student may take MTH125	5	MTH025 or Proficiency
	(College Algebra) and MTH130 (Trigonometry)		
EET120	over two semesters to satisfy this requirement.	4	D C MT1127
EET120	DC Circuit Analysis	<u>4</u>	Pre-Co-MTH125
		10	or Pre-Co-MTH135
C1 C4		18	
Second Semester SOC225	Diversity in American Society^	3	IDS102 or Proficiency
MTH223	Analytical Geometry and Calculus I^*	4	MTH135 or (MTH125 and MTH130) or
WH 1 11223	Analytical Geometry and Calculus I	4	Proficiency
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or
LL1122	AC Circuit Analysis	7	Pre-Co-MTH135) and EET120
PHL122	Ethics	<u>3</u>	,
		<u>-</u> 14	
Summer Semester			
MTH224	Analytical Geometry and Calculus II	$\frac{4}{4}$	MTH223
		4	
Third Semester			
PHY221	General Physics I w/Calculus (lab)	5	MTH223 and MTH224
MTH225	Analytical Geometry and Calculus III	4	MTH224
MET124	Statics and Strength of Materials	<u>4</u>	Pre-Co-PHY121 or Pre-Co-PHY221
		13	
Fourth Semester			
CSE122	Programming Logic and Problem Solving <sup>^</sup>	3	(IDS102 or Proficiency)
			and (ITD100 or Proficiency)
MTH227	Ordinary Differential Equations	3	MTH224
BUS221	Microeconomics^	3	IDS102 or Proficiency
CST121	Modeling and Simulation	3	MTH221 or MTH223
HIS122	U.S. History II from 1877	3	
	mam. 1. apart. 20	15	
and an SSC placement and	TOTAL CREDITS	64	

<sup>^</sup>Based on SSC placement scores

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> 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.

<sup>\*</sup>Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.



# ASSOCIATE OF APPLIED SCIENCE CIVIL ENGINEERING TECHNOLOGY

**2024-25 Catalog** 

Effective Summer 2024

4200



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET122	Architectural Drafting I	3		
CET125	Soil Mechanics	3	(MTH125 or MTH135) and MET124	
CET222	Concrete and Asphalt Testing	3	(MTH125 or MTH135) and CET121	
CET223	Structural Design I	3	Pre-Co-MET124	
CET226	Estimating	3	(MTH025 or Proficiency) and CET121 and (ITD100 or Proficiency) and (CET122 or DET125 or CET237)	
CET227	Surveying I	3	MTH125 or MTH135	
CET228	Surveying II	3	CET227	
CET232	Land Planning and Design	3	Pre-Co-CET227 and (CET122 or CET124 or DET125)	
CET234	Architectural CAD (REVIT 3D – BIM)	3	CET121 and CET122	
CET236	Global Positioning Systems	3	CET227	
	Total	30		
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		
DET125	Basic AutoCAD	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	Select one (1) Arts & Humanities Elective from list below. <sup>1</sup>	3	Check for prerequisites	
	Total	32		
	TOTAL CREDIT HOURS	62		

See back page for footnotes

Students completing this degree may be eligible to also receive a Civil Engineering Technology – Transportation Construction Inspection Level II Career Enhancement Certificate (4212), a Civil Engineering Technology – Construction Materials Inspection Career Enhancement Certificate (4209) and a Civil Engineering Technology – Civil/Surveying Career Enhancement Certificate (4207).

**CIVIL ENGINEERING TECHNOLOGY** 

4200

Effective Summer 2024

#### 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

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency
CET121	Building Materials and Construction Methods	3	·
CET122	Architectural Drafting I	3	
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
		18	
Second Semester			
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221
DET125	Basic AutoCAD	3	
CET227	Surveying I	3	MTH125 or MTH135
PHY121	College Physics I with Algebra (lab)	<u>4</u>	MTH135 or (MTH125 and MTH130) or Proficiency
		14	•
Third Semester			
CET125	Soil Mechanics	3	(MTH125 or MTH135) and MET124
ENG221	Technical Report Writing	3	ENG124
CET223	Structural Design I	3	Pre-Co-MET124
CET222	Concrete and Asphalt Testing	3	(MTH125 or MTH135) and CET121
CET232	Land Planning and Design	<u>3</u>	Pre-Co-CET227 and (CET122 or CET124 or DET125)
		15	,
Fourth Semester			
CET226	Estimating	3	(MTH025 or Proficiency) and CET121 and (ITD100 or Proficiency) and (CET122 or DET125 or CET237)
CET236	Global Positioning Systems	3	CET227
CET228	Surveying II	3	CET227
CET234	Architectural CAD (REVIT 3D – BIM)	3	CET121 and CET122
Arts & Humanities	· · · · · · · · · · · · · · · · · · ·	<u>3</u>	Check for prerequisites
		15	A 1 - A
	TOTAL CREDITS	62	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122



#### ASSOCIATE OF APPLIED SCIENCE

### **CIVIL ENGINEERING TECHNOLOGY -ARCHITECTURAL MAJOR**

**2024-25 Catalog** Effective Summer 2024

4201



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-*13-28*.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET122	Architectural Drafting I	3		
CET123	Architectural Drafting II	3	CET121 and CET122	
CET223	Structural Design I	3	Pre-Co-MET124	
CET225	Sustainable Building Service Systems	3	CET121	
CET226	Estimating	3	(MTH025 or Proficiency) and CET121 and (ITD100 or Proficiency) and (CET122 or DET125 or CET237)	
CET227	Surveying I	3	MTH125 or MTH135	
CET232	Land Planning and Design	3	Pre-Co-CET227 and (CET122 or CET124 or DET125)	
CET233	Architectural Design	3	CET122 and Pre-Co-CET123	
CET234	Architectural CAD (REVIT 3D – BIM)	3	CET121 and CET122	
CET235	Construction Management, Job Cost and Safety	3	CET121 <b>and</b> (ITD100 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	
CET121	Building Materials and Construction Methods	3		
DET125	Basic AutoCAD	3		
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 <b>or</b> (MTH125 and MTH130) <b>or</b> Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
	Select one (1) Arts & Humanities Elective from the list below. <sup>1</sup>	3	Check for prerequisites	
	Total	32		
	TOTAL CREDIT HOURS	62		

See back page for footnotes

Students completing this degree may be eligible to also receive a Civil Engineering Technology - Architectural Drafting Career Enhancement Certificate (4206).

Effective Summer 2024

# CIVIL ENGINEERING TECHNOLOGY – ARCHITECTURAL MAJOR

4201

#### 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

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
CET121	<b>Building Materials and Construction Methods</b>	3	·
CET122	Architectural Drafting I	3	
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency
ITD122	Computer Applications for Professionals^	3 18	ITD100 or Proficiency
Second Semester			
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221
CET123	Architectural Drafting II	3	CET121 and CET122
CET227	Surveying I	3	MTH125 or MTH135
PHY121	College Physics I with Algebra (lab)	<u>4</u>	MTH135 or (MTH125 and MTH130) or Proficiency
		14	·
Third Semester			
DET125	Basic AutoCAD	3	
CET223	Structural Design I	3	Pre-Co-MET124
CET225	Sustainable Building Service Systems	3	CET121
CET232	Land Planning and Design	3	Pre-Co-CET227 and (CET122 or CET124 or DET125)
CET235	Construction Management, Job Cost and Safety	<u>3</u>	CET121 and (ITD100 or Proficiency)
		15	
Fourth Semester			
CET226	Estimating	3	(MTH025 or Proficiency) and CET121 and (ITD100 or Proficiency) and (CET122 or DET125 or CET237)
CET233	Architectural Design	3	CET122 and Pre-Co-CET123
CET234	Architectural CAD (REVIT 3D – BIM)	3	CET121 and CET122
ENG221	Technical Report Writing	3	ENG124
Arts & Humanitie		<u>3</u>	Check for prerequisites
		15	<del>-</del>
	TOTAL CREDITS	62	
APagad on SSC plagar	mant saanas		

<sup>^</sup>Based on SSC placement scores

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122



#### ASSOCIATE OF APPLIED SCIENCE

### CIVIL ENGINEERING TECHNOLOGY -

**2024-25 Catalog** 

Effective Summer 2024

4204



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

CONSTRUCTION MANAGEMENT MAJOR

Business, Engineering, and Information Technologies Division

Engineering Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET125	Soil Mechanics	3	(MTH125 or MTH135)	
or	or	or	and MET124	
CET222	Concrete and Asphalt Testing	3	(MTH125 or MTH135)	
CET223	Structural Design I	3	and CET121 Pre-Co-MET124	
CE1225 CET225	Sustainable Building Service Systems	3	CET121	
CE1223	Sustainable Building Service Systems	3	(MTH025 or Proficiency) and	
CETTOO (		2	CET121 and (ITD100 or	
CET226	Estimating	3	Proficiency) and (CET122 or	
		DET125 or CET237)   3		
CET227	Surveying I	3		
CET232	Land Planning and Design	3		
CE1232	Edita Flamming and Design			
CET235	Construction Management, Job Cost and Safety	3		
GETT224	•			
CET236 CET237	Global Positioning Systems Interpreting Construction Documents		CE1227	
	Interpreting Construction Documents	3	CET121 and (CET227	
CET239	Building Code Applications	3		
	Total	30	01 CE1122)	
NON-TECH	Course Title	Credits	Pre- and Co-Requisites	
Course Number		0100100	222 3333 23 233 433333	Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
CET121	Building Materials and Construction Methods	3		
DET125	Basic AutoCAD	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	Select one (1) Arts & Humanities Elective from the list below. <sup>1</sup>	3	Check for prerequisites	
	Total	32		
	TOTAL CREDIT HOURS	62		

See back page for footnotes

Students completing this degree may be eligible to also receive a Civil Engineering Technology – Construction Technician Certificate (4210), a Civil Engineering Technology – Construction Materials Inspection Career Enhancement Certificate (4209), a Civil Engineering Technology – Transportation Construction Inspection Level I (4211), and a Civil Engineering Technology – Civil/Surveying Draft Career Enhancement Certificate (4208).

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Effective Summer 2024

# CIVIL ENGINEERING TECHNOLOGY – CONSTRUCTION MANAGEMENT MAJOR

4204

#### 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

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency
CET121	Building Materials and Construction Methods	3	
CET237	Interpreting Construction Documents	3	
DET125	Basic AutoCAD	3	
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
		18	
Second Semester			
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221
CET227	Surveying I	3	MTH125 <b>or</b> MTH135
PHY121	College Physics I with Algebra (lab)	<u>4</u>	MTH135 or (MTH125 and MTH130) or Proficiency
		14	(WITTIES and WITTIESO) of Fronciency
Third Semester			
CET125	Soil Mechanics	3	(MTH125 or MTH135) and MET124
or CET222	or	or	(MTH125 MTH125) CET121
CET222 CET223	Concrete and Asphalt Testing Structural Design I	3 3	(MTH125 or MTH135) <b>and</b> CET121 Pre-Co-MET124
CET225	Sustainable Building Service Systems	3	CET121
CET232	Land Planning and Design	3	Pre-Co-CET227 <b>and</b> (CET122 or CET124 or DET125)
CET235	Construction Management, Job Cost and Safety	<u>3</u>	CET124 of DET123) CET121 and (ITD100 or Proficiency)
	•	15	• /
Fourth Semester			
ENG221	Technical Report Writing	3	ENG124
Arts & Humanities	Elective <sup>1</sup>	3	Check for prerequisites
CET239	Building Code Applications	3	CET121 and (CET237 or CET122)
CET226	Estimating	3	(MTH025 or Proficiency) and CET121 and (ITD100 or Proficiency) and (CET122 or DET125 or CET237
CET236	Global Positioning Systems	<u>3</u>	CET227
		15	
	TOTAL CREDITS	62	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122



#### ASSOCIATE OF SCIENCE

### PRE-ENGINEERING - CIVIL ENGINEERING

The catalog in force is assigned to students based on the academic year they first applied to the college, and

changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** Effective Summer 2024

4205



Business, Engineering, and Information Technologies Division

Engineering Technology Department

### ARTICULATING TO A BS IN CIVIL ENGINEERING WITH THE UNIVERSITY OF AKRON and UNIVERSITY OF MOUNT UNION

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year			
FRESHMAN EXP	FRESHMAN EXPERIENCE						
SSC101	Student Success Seminar^^	1	Take first semester				
ENGLISH COMPO	OSITION & ORAL COMMUNICATION						
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency				
SOCIAL & BEHA	VIORAL SCIENCES						
BUS221	Microeconomics^	3	IDS102 or Proficiency				
SOC225	Diversity in American Society^	3	IDS102 or Proficiency				
ARTS & HUMAN	ITIES						
HIS122	U.S. History II from 1877	3					
PHL122	Ethics	3					
NATURAL SCIEN	ICES						
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)				
CHM142	General Chemistry II (lab)	5	CHM141				
MATHEMATICS,	STATISTICS AND LOGIC						
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency				
MTH223	Analytical Geometry and Calculus I^*	4	MTH135 or (MTH125 and MTH130) or Proficiency				
MTH224	Analytical Geometry and Calculus II	4	MTH223				
CONCENTRATIO	ON CORE						
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 and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221				
MET221	Advanced Strength of Materials	2	MET124				
	TOTAL CREDIT HOURS	63					

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> 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.

<sup>\*</sup>Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

#### PRE-ENGINEERING - CIVIL ENGINEERING

4205

#### 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

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or
ENG124	College Composition^	3	(MTH024 or MTH025 or Proficiency) Co-ENG024 or Co-ENG011 or Proficiency
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	<u>5</u>	MTH025 or Proficiency
	1	14	
Second Semester			
PHL122	Ethics	3	
SOC225	Diversity in American Society^	3	IDS102 or Proficiency
MTH223	Analytical Geometry and Calculus 1 <sup>*</sup>	4	MTH135 or (MTH125 and
			MTH130) or Proficiency
CHM142	General Chemistry II (lab)	<u>5</u>	CHM141
G		15	
Summer Semester MTH224	Analytical Geometry and Calculus II	$\frac{4}{4}$	MTH223
Third Semester		7	
PHY221	General Physics I w/Calculus (lab)	5	MTH223 and MTH224
MTH225	Analytical Geometry and Calculus III	4	MTH224
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or
WILTIZT	Statios and Strongth of Materials	7	Pre-Co-PHY221
CST121	Modeling and Simulation	<u>3</u>	MTH221 <b>or</b> MTH223
	-	16	
Fourth Semester			
DET125	Basic AutoCAD	3	
BUS221	Microeconomics <sup>^</sup>	3	IDS102 or Proficiency
HIS122	U.S. History II from 1877	3	•
MET221	Advanced Strength of Materials	2	MET124
MTH227	Ordinary Differential Equations	2 <u>3</u> 14	MTH224
		1 <del>-</del> 4	
	TOTAL CREDITS	63	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

ABecause 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.

<sup>\*</sup>Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

# PRE-ENGINEERING - CIVIL ENGINEERING

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# **The University of Akron**

#### Elective Additional Credit

Bridge courses that can be taken at Stark State College, prior to attending The University of Akron, that apply towards The University of Akron BS Degree: CET227 Surveying I, CET228 Surveying II, COM121 Effective Speaking, ENG221 Technical Report Writing, ENG231 College Composition II, and PHY222 General Physics II w/Calculus. If you plan on taking additional courses at Stark State College beyond this list, we recommend you verify transferability with a University of Akron advisor prior to taking the course. 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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. Contact The University of Akron's Transfer Student Services Center (330-972-7009) during the first semester to discuss junior year Stark State College Associate of Science pre-engineering transition strategies to The University of Akron's Engineering BS programs.

### **University of Mount Union**

#### Summer 2

After completing the Pre-Engineering Program at Stark State College, it is expected that you complete the Thermal Science (2 credits) and Fluid Mechanics I (2 credits) courses at the University of Mount Union to stay on track to complete the BS Degree in four years.

#### Elective Additional Credit

Bridge courses that can be taken at Stark State College, prior to attending the University of Mount Union, that apply towards the University of Mount Union's BS Degree: Foreign Language I, Foreign Language II, PHY 222 General Physics II w/Calculus, and CET121 Building Materials and Construction Methods. If you plan on taking additional courses at Stark State College beyond this list, we recommend you verify transferability with a University of Mount Union advisor prior to taking the course. 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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. Contact the University of Mount Union's Transfer Student Services Center number (330-829-8238) during the first semester to discuss junior year Stark State College Associate of Science pre-engineering transition strategies to the University of Mount Union's Engineering BS programs.

#### Advising:

You are highly encouraged to contact the Chair of the Department of Engineering at the University of Mount Union during your first year at Stark State for curricular advising to stay on track to graduate with a BS degree in four years. You can reach the Department of Engineering at 330-823-3253.



# ASSOCIATE OF APPLIED SCIENCE

#### Effective Summer 2024

**2024-25 Catalog** 

4300



# INDUSTRIAL TECHNOLOGY

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing.

Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT101	Basic Machines	2		
MST121	Blueprint Reading	2		
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency	
MST221	Mechanical Drive Components	3		
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) <b>or</b> MTH107	
IET270	Dimensional Metrology and Inspection I^	3	(MTH025 or Proficiency) <b>or</b> MTH107	
AIT139	Introduction to Robotics	2		
MST125	Basic Pumps	3		
MET225	Manufacturing Processes	3		
TECHNICAL EL	ECTIVES: 7 credit hours minimum (typically 2	to 3 classes)		
	See Technical Elective list below. <sup>2</sup> ##	7	Check for prerequisites	
	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	
PHY101	Principles of Physics^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	
MTH107	Industrial Math^	3	(MTH021 or Proficiency) <b>or</b> Pre-Co-MTH007	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM121	Effective Speaking	3		
or	or	or	IDG102 5 7	
COM123	Small Group Communication^	3	IDS102 or Proficiency	
IET121	Industrial Management Concepts	2		
MET123	Material Science	3		
	Select two (2) courses of Arts & Humanities and/or Social & Behavioral Sciences Electives from the list below. <sup>1</sup>	6	Check for prerequisites	
	Total	31		
	TOTAL CREDIT HOURS	64		

<sup>^</sup>Based upon SSC placement score

##Participation in CDL121 requires a valid Ohio Driver's License. Must be 18 years of age and show proof of legal presence in the United States. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen.

Please reach out to your academic advisor to see what other Career Enhancement and One-Year Certificates you may be eligible for upon completion of this degree.

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup> Arts & Humanities and/or Social & Behavioral Sciences Electives: any course with the following catalog entry: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122, SOC, PSY

<sup>&</sup>lt;sup>2</sup> <u>Technical Electives</u>: See second page

# **INDUSTRIAL TECHNOLOGY**

4300

	TECHNICAL ELECTIVES: 7 credit hours minimum from the list below.					
Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
ABC110	Electrical Applications I	6				
ABC120	Electrical Applications II	5				
AIT103	Non-Destructive Testing	2				
AIT122	Machine Tools	4				
AIT123	Advanced Machine Tools	4	AIT122			
AIT124	Principles of Rigging	2				
AIT125	Commercial Plumbing	3				
AIT134	Preventive and Predictive Maintenance	3				
AIT137	CAD/CAM	4	AIT122 and IET223			
AIT220	Industrial Robotics	4				
AIT221	Advanced CNC Programming	3	IET223 or ARL121 or ARL122			
CDL121	CDL - Class A – Safe Operation and Control ##	6				
CDL122	CDL - Class A – Advanced Operations and Maintenance	6	CDL121			
DET125	Basic AutoCAD	3				
EET123	Electronic Devices and Circuits	4	EET120 or EST230			
EET227	PLC's and Industrial Controls I	3	EET120 or EST230			
ENV123	OSHA 10-Hour General Industry Safety	1				
ENV124	Transportation Hazardous Mat Training	1				
ENV165	OSHA 10-Hour Construction Safety	1				
ENV221	OSHA 40-Hour HAZWOPER	2				
ENV230	OSHA 8-Hour HAZWOPER Refresher	1				
ENV231	OSHA 30-Hour General Industry	2				
ETD225	Engineering Special Topics	6				
ETD226	Engineering Special Topics	2				
ETD227	Engineering Special Topics	3				
ETD228	Engineering Special Topics	4				
ETD229	Engineering Special Topics	5				
IET223	Computer Numerical Control	4				
MST126	Pipefitting Principles & Applications	3				
MST127	Principles of Welding	6				
MST135	Plumb and Pipe Code Principles	3				
MST136	3G and 4G Welding Cert Exam Preparatory	4	MST127			
MST137	6G Welding Cert Exam Preparatory	4	MST136			
MST138	Preparatory Gas Tungsten Arc Welding	4	MST127			
MST139	Gas Tungsten Arc Welding	3	MST138			
MST227	Metallic Inert Gas Welding	3	MST127			
PIP110	Plumbing/Pipefitting Applications I	6				
PIP120	Plumbing/Pipefitting Applications II	6				
PIP130	Plumbing/Pipefitting Applications III	6				
PIP140	HVAC Systems Operations I	6				
PIP150	HVAC Systems Operations II	6		<u> </u>		

##Participation in CDL121 requires a valid Ohio Driver's License. Must be 18 years of age and show proof of legal presence in the United States. 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
AIT101	Basic Machines	2	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MTH107	Industrial Math <sup>^</sup>	3	(MTH021 or Proficiency) or Pre-Co-MTH007
IET270	Dimensional Metrology and Inspection I^	<u>3</u>	(MTH025 or Proficiency) or MTH107
		15	
Second Semester			
MST121	Blueprint Reading	2	
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or MTH107
IET121	Industrial Management Concepts	2	
MET123	Material Science	<u>3</u>	
		15	
Third Semester			
ENG221	Technical Report Writing	3	ENG124
PHY101	Principles of Physics^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)
COM121	Effective Speaking	3	3,
or	or	or	
COM123	Small Group Communication <sup>^</sup>	3	IDS102 or Proficiency
AIT139	Introduction to Robotics	2	
MET225	Manufacturing Processes	3	
Arts & Humanities a	and/or Social & Behavioral Sciences Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		18	
Fourth Semester			
MST221	Mechanical Drive Components	3	
Technical Electives 2	2 ##	7	Check for prerequisites
MST125	Basic Pumps	3	
Arts & Humanities a	and/or Social & Behavioral Sciences Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		16	
	TOTAL CREDITS	64	

<sup>^</sup>Based upon SSC placement score

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup> Arts & Humanities and/or Social & Behavioral Sciences Electives: any course with the following catalog entry: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122, SOC, PSY

<sup>##</sup>Participation in CDL121 requires a valid Ohio Driver's License. Must be 18 years of age and show proof of legal presence in the United States. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen.

<sup>&</sup>lt;sup>2</sup> <u>Technical Electives</u>: See second page



# ONE-YEAR CERTIFICATE CNC TECHNICAL

**2024-25 Catalog** 

Effective Summer 2024

4308

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

MY ACADEMIC PLAN

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre-and Co-Requisites	Completed Sem./Year
AIT122	Machine Tools	4		
AIT123	Advanced Machine Tools	4	AIT122	
IET223	Computer Numerical Control	4		
AIT221	Advanced CNC Programming	3	IET223 or ARL121 or ARL122	
DET121	Engineering Drawing	3		
or MST121	or Blueprint Reading	or 2		
DET125	Basic AutoCAD	3		
IET270	Dimensional Metrology and Inspection I ^	3	(MTH025 or Proficiency) <b>or</b> MTH107	
AIT137	CAD/CAM	4	AIT122 and IET223	
	Total	27-28		
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	3		
MTH107 or MTH125	Industrial Math^ or College Algebra Ω	3 <b>or</b> 4	Check for prerequisites	
	Total	10-11		
	TOTAL CREDIT HOURS	37-39		

<sup>^</sup>Based on SSC placement scores

Students completing this certificate may be eligible to also receive an Industrial Technology – CAD/CAM Specialist (Computer-Aided Drafting/Computer-Aided Machining) Career Enhancement Certificate (4316) and Industrial Technology – Precision Machining and CNC Programming Career Enhancement Certificate (4319).

The classes in this certificate also apply toward the completion of an Industrial Technology Degree (4300).

<sup>^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

### **ONE-YEAR CERTIFICATE**

# **CNC TECHNICAL**

4308

### 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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	Take first semester
MTH107	Industrial Math^	3	
or MTH125	or College Algebra $\Omega$	<b>or</b> 4	Check for prerequisites
AIT122	Machine Tools	4	
IET223	Computer Numerical Control	4	
DET121	Engineering Drawing	3	
or MST121	<b>or</b> Blueprint Reading	or <u>2</u>	
1122121	Zimpimi itaning	<u>=</u> 14-16	
Second Semester			
AIT123	Advanced Machine Tools	4	AIT122
AIT137	CAD/CAM	4	AIT122 and IET223
AIT221	Advanced CNC Programming	3	IET223 or ARL121 or ARL122
IET270	Dimensional Metrology and Inspection I^	3	(MTH025 or Proficiency) or
MET123	Material Science	<u>3</u>	MTH107
		17	
Third Semester			
DET125	Basic AutoCAD	3	
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
		6	
	TOTAL CREDITS	37-39	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

 $<sup>\</sup>Omega$  MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.



# **ONE-YEAR CERTIFICATE**

# **WELDING TECHNOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and

changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

**2024-25 Catalog** 

Effective Summer 2024

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Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT228	Automated Welding and Fabrication	3	MST127 and AIT220	
MST127	Principles of Welding	6		
MST136	3G and 4G Welding Certification Exam Preparatory	4	MST127	
MST137	6G Welding Certification Exam Preparatory	4	MST136	
MST138	Preparatory Gas Tungsten Arc Welding	4	MST127	
MST139	Gas Tungsten Arc Welding	3	MST138	
MST227	Metallic Inert Gas Welding	3	MST127	
	Total	27		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
AIT103	Non-Destructive Testing	2		
AIT220	Industrial Robotics	4		
MST121	Blueprint Reading	2		
	Total	9		
	TOTAL CREDIT HOURS	36		

<sup>^</sup>Based on SSC placement scores

Students completing this certificate may be eligible to also receive an Industrial Technology – 3G and 4G Welding Certification Exam Preparation Career Enhancement Certificate (4321), an Industrial Technology – 6G Welding Certification Exam Preparation Career Enhancement Certificate (4322), an Industrial Technology – Tungsten Inert Gas Welding Career Enhancement Certificate (4324) and an Industrial Technology – Welding Technology AWS\* Certification Exam Preparation Career Enhancement Certificate (4320).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

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Effective Summer 2024

# ONE-YEAR CERTIFICATE WELDING TECHNOLOGY

4309

# 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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- or Co-requisite
SSC101	Student Success Seminar^^	1	Take first semester
MST121	Blueprint Reading	2	
AIT103	Non-Destructive Testing	2	
AIT220	Industrial Robotics	4	
MST127	Principles of Welding	<u>6</u>	
		15	
Second Semester			
AIT228	Automated Welding and Fabrication	3	MST127 and AIT220
MST136	3G and 4G Welding Certification Exam Preparatory	4	MST127
MST138	Preparatory Gas Tungsten Arc Welding	4	MST127
MST227	Metallic Inert Gas Welding	<u>3</u>	MST127
		13	
Third Semester			
MST137	6G Welding Certification Exam Preparatory	4	MST136
MST139	Gas Tungsten Arc Welding	<u>3</u>	MST138
		7	
	TOTAL CREDITS	36	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

# ASSOCIATE OF APPLIED SCIENCE

# **2024-25 Catalog**

Effective Summer 2024

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# **INDUSTRIAL TECHNOLOGY – INDUSTRIAL MAINTENANCE MAJOR**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT101	Basic Machines	2		
AIT134	Preventive and Predictive Maintenance	3		
AIT139	Introduction to Robotics	2		
AIT122	Machine Tools	4		
AIT220	Industrial Robotics	4		
AIT228	Automated Welding and Fabrication	3	AIT220 and MST127	
EST230	Electrical Circuits and Devices	4	(MTH025 or Proficiency) <b>or</b> MTH107	
MST126	Pipefitting Principles and Applications	3		
MST127	Principles of Welding	6		
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency	
	Total	35		
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	3	(MTH021 or Proficiency) <b>or</b> Pre-Co-MTH007	
AIT124	Principles of Rigging	2		
MST121	Blueprint Reading	2		
MST125	Basic Pumps	3		
MST221	Mechanical Drive Components	3		
PHY101	Principles of Physics^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
or	or	or	or	
COM123	Small Group Communications^	3	IDS102 or Proficiency	
PSY124	Industrial/Organizational Psych	3		
	Total	30		
	TOTAL CREDIT HOURS	65		

<sup>^</sup>Based on SSC placement scores

 $The\ classes\ in\ this\ major\ also\ apply\ toward\ the\ completion\ of\ an\ Industrial\ Technology-Welding\ Technology\ AWS^*\ Certification\ Example and the completion\ of\ an\ Industrial\ Technology\ AWS^*\ Certification\ Example and the completion\ of\ an\ Industrial\ Technology\ AWS^*\ Certification\ Example and the completion\ of\ an\ Industrial\ Technology\ AWS^*\ Certification\ Example and the completion\ of\ an\ Industrial\ Technology\ AWS^*\ Certification\ Example\ Exampl$ Preparation Career Enhancement Certificate (4320), an Industrial Technology - Basic Industrial Maintenance Career Enhancement Certificate (4407), and an Industrial Technology - Mechanical Drive Systems Career Enhancement Certificate (4318).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

# INDUSTRIAL TECHNOLOGY – INDUSTRIAL MAINTENANCE MAJOR

4351

### 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.

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
MST127	Principles of Welding	6	
AIT139	Introduction to Robotics	2	
EST230	Electrical Circuits and Devices	4	(MTH025 or Proficiency) or MTH107
AIT101	Basic Machines	2	
MTH107	Industrial Math	<u>3</u>	(MTH021 or Proficiency) <b>or</b> Pre-Co- MTH007
		18	
Second Semester			
AIT220	Industrial Robotics	4	
AIT122	Machine Tools	4	
AIT134	Preventive and Predictive Maintenance	3	
MST121	Blueprint Reading	2	
MST126	Pipefitting Principles and Application	<u>3</u>	
		16	
Third Semester			
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency
PHY101	Principles of Physics^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MST125	Basic Pumps	3	ee Erveo2 var ee Erveo11 of 11emenone,
AIT228	Automated Welding and Fabrication	<u>3</u>	
	C	<del>-</del> 7	
Fourth Semester			
ITD122	Computer Applications for Professionals	3	ITD100 or Proficiency
PSY124	Industrial/Organizational Psych	3	·
MST221	Mechanical Drive Components	3	
AIT124	Principles of Rigging	2	
ENG221	Technical Report Writing	3	ENG124
or	or	or	or
COM123	Small Group Communication^	<u>3</u>	IDS102 or Proficiency
		14	
	TOTAL CREDITS	65	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester



# ONE-YEAR CERTIFICATE INDUSTRIAL MAINTENANCE

**2024-25 Catalog** 

Effective Summer 2024

4352



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT101	Basic Machines	2		
AIT134	Preventive and Predictive Maintenance	3		
MST121	Blueprint Reading	2		
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency	
MST125	Basic Pumps	3		
MST221	Mechanical Drive Components	3		
AIT220	Industrial Robotics	4		
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) <b>or</b> MTH107	
EET227	PLCs and Industrial Controls I	3	EET120 or EST230	
MST127	Principles of Welding	6		
	Total	34		
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^	3	(MTH021 or Proficiency) or Pre-Co- MTH007	
	Total	4		
	TOTAL CREDIT HOURS	38		

<sup>^</sup>Based on SSC placement scores.

Students completing this degree may be eligible to also receive an Industrial Technology – Basic Industrial Maintenance Career Enhancement Certificate (4407) an Industrial Technology – Welding Technology AWS\* Certification Exam Preparation Career Enhancement Certificate (4320), and an Industrial Technology – Mechanical Drive Systems (4318).

The classes in this certificate also apply toward the completion of an Industrial Technology Degree (4300).

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

# **2024-25 Catalog**

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# ONE-YEAR CERTIFICATE INDUSTRIAL MAINTENANCE

4352

# 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 students seeking a one-year certificate.

Summer Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
AIT134	Preventive and Predictive Maintenance	3	
MST121	Blueprint Reading	2	
MTH107	Industrial Math^	<u>3</u>	(MTH021 or Proficiency) <b>or</b> Pre-Co- MTH007
		9	
Fall Semester			
AIT101	Basic Machines	2	
AIT220	Industrial Robotics	4	
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or MTH107
MST125	Basic Pumps	3	
MST221	Mechanical Drive Components*	<u>3</u>	
		16	
Spring Semester			
EET227	PLCs and Industrial Controls I	3	EET120 or EST230
MST127	Principles of Welding	6	
MST134	Hydraulic and Pneumatic Systems^	<u>4</u>	MTH022 or MTH023
		13	or Proficiency
	TOTAL CREDITS	38	

<sup>^</sup>Based on SSC placement scores.

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

<sup>\*</sup>It is recommended that MST221 be taken during the first 8-week session so that MST125 can be taken during the second 8-week session.



# ASSOCIATE OF APPLIED SCIENCE

# **2024-25 Catalog**

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# INDUSTRIAL TECHNOLOGY – ADVANCED MANUFACTURING TECHNOLOGY MAJOR



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Businss, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT122	Machine Tools	4		
IET223	Computer Numerical Control	4		
AIT221	Advanced CNC Programming	3	IET223 or ARL121 or ARL122	
AIT134	Preventive and Predictive Maintenance	3		
AIT220	Industrial Robotics	4		
AIT226	Robotic Vision	2	AIT220	
IET270	Dimensional Metrology and Inspection I^	3	(MTH025 or Proficiency) <b>or</b> MTH107	
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency	
MST221	Mechanical Drive Components	3		
or	or	or		
MET225	Manufacturing Processes	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	
AIT101	Basic Machines^^	2	Take first semester	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
DET125	Basic AutoCAD	3		
or	or	or		
AIT137	CAD/CAM	4	AIT122 and IET223	
MST121	Blueprint Reading	2		
PHY101	Principles of Physics^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	
MTH107	Industrial Math^	3	(MTH021 or Proficiency) <b>or</b> Pre- Co-MTH007	
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) <b>or</b> MTH107	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
COM121	Effective Speaking	3		
or	or	or		
COM123	Small Group Communication^	3	IDS102 or Proficiency	
IET121	Industrial Management Concepts	2	.,	
	Select one (1) course of Arts & Humanities and/or Social & Behavioral Sciences Elective from the list below. <sup>1</sup>	3	Check for prerequisites	
	Total	33-34		
	TOTAL CREDIT HOURS	63-64		

See back page for footnotes

Students completing this degree may be eligible to also receive an Industrial Technology – CAD/CAM Specialist (Computer-Aided Drafting/Computer-Aided Machining Career Enhancement Certificate (4316) and an Industrial Technology – Basic Industrial Maintenance Career Enhancement Certificate (4407).

# INDUSTRIAL TECHNOLOGY – ADVANCED MANUFACTURING TECHNOLOGY MAJOR

4353

# 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^	1	Take first semester
AIT101	Basic Machines^^	2	Take first semester
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
AIT134	Preventive and Predictive Maintenance	3	
AIT122	Machine Tools	4	
MTH107	Industrial Math^	<u>3</u>	(MTH021 or Proficiency) or
		_	Pre-Co-MTH007
		16	11c-Co-W1111007
Second Semester			
MST121	Blueprint Reading	2	
MST221	Mechanical Drive Components	3	
or	or	or	
MET225	Manufacturing Processes	3	
IET121	Industrial Management Concepts	2	
IET270	Dimensional Metrology and Inspection I^	3	(MTH025 or Proficiency) or
			MTH107
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011
			or Proficiency
AIT220	Industrial Robotics	4	of 1 foliciency
7111220	maastrar Robotics	<u>4</u> 17	
Third Semester		17	
IET223	Computer Numerical Control	4	
PHY101	Principles of Physics^	4	(MTH024 or MTH025 or
1111101	Timespies of Thysics	7	Proficiency) or MTH105 or
			MTH107 and (IDS102 or
			Proficiency)
DET125	Basic AutoCAD	3	1 Toffciency)
or	or	or	
AIT137	CAD/CAM	4	AIT122 and IET223
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or
L51230	Electrical Circuits and Devices	<u> </u>	MTH107
		15-16	WITITO
Fourth Semester		13-10	
Tourm Semester			
COM121	Effective Speaking	3	
or	or	or	
COM123	Small Group Communication^	3	IDS102 or Proficiency
AIT221	Advanced CNC Programming	3	IET223 or ARL121 or ARL122
AIT226	Robotic Vision	2	AIT220
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023
	,	•	or Proficiency
Arts & Humanities	and/or Social & Behavioral Sciences Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
mis & manufalles t	and or social & Denuvioral sciences Liective	<u>5</u> 15	Check for prerequisites
	TOTAL CREDITS	63-64	
		00 0.	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Arts & Humanities and/or Social & Behavioral Sciences Electives: ENG233, ENG234, ENG236, ENG237, PHL122, any HIS course, any SOC course, or any PSY course.



# ASSOCIATE OF APPLIED SCIENCE

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# **ELECTRICAL MAINTENANCE TECHNOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT134	Preventive and Predictive Maintenance	3		
AIT139	Introduction to Robotics	2		
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135) <b>and</b> EET120	
EET123	Electronic Devices and Circuits	4	EET120 and Pre-Co-EET122	
MST221	Mechanical Drive Components	3		
EST129	Switchgear, Transformers and Controls	2	EET122 or EST230	
EET126	Electrical Machines	4	Pre-Co-EET122	
EET128	NEC and Electrical Systems Design	2	EET122	
EET227	PLCs and Industrial Controls I	3	EET120 or EST230	
EET228	PLCs and Industrial Controls II	3	EET227	
	Total	34		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT101	Basic Machines	2		
SSC101	Student Success Seminar^^	1	Take first semester	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MST121	Blueprint Reading	2	Í	
	Diucpinit Reading	2		
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency	
MST134 MTH135	Hydraulic and Pneumatic Systems^  Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over			
	Hydraulic and Pneumatic Systems^  Precalculus^ – A student may take MTH125	4	or Proficiency  MTH025 or Proficiency  MTH135 or  (MTH125 and MTH130) or	
MTH135	Hydraulic and Pneumatic Systems^  Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	or Proficiency  MTH025 or Proficiency  MTH135 or	
MTH135 PHY121	Hydraulic and Pneumatic Systems^  Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.  College Physics I with Algebra (lab)  College Composition^	4 5 4	or Proficiency  MTH025 or Proficiency  MTH135 or (MTH125 and MTH130) or Proficiency Co-ENG024 or Co-	
MTH135  PHY121  ENG124	Hydraulic and Pneumatic Systems^  Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.  College Physics I with Algebra (lab)	4 5 4 3	or Proficiency  MTH025 or Proficiency  MTH135 or (MTH125 and MTH130) or Proficiency  Co-ENG024 or Co- ENG011 or Proficiency	
MTH135  PHY121  ENG124	Hydraulic and Pneumatic Systems^  Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.  College Physics I with Algebra (lab)  College Composition^  Technical Report Writing  Select one (1) Arts & Humanities Elective	4 5 4 3 3	or Proficiency  MTH025 or Proficiency  MTH135 or (MTH125 and MTH130) or Proficiency  Co-ENG024 or Co- ENG011 or Proficiency  ENG124	

<sup>^</sup>Based on SSC placement scores.

Students completing this degree may be eligible to also receive an Electrical/Electronic Engineering Technology – Industrial Controls Career Enhancement Certificate (4409) and and Electrical/Electronic Engineering Technology - Electrical/Electronic Troubleshooting (4408).

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

<sup>&</sup>lt;sup>1</sup>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.

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
AIT101	Basic Machines	2	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	<u>5</u>	MTH025 or Proficiency
		15	
Second Semester			
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135) and EET120
AIT134	Preventive and Predictive Maintenance	3	
AIT139	Introduction to Robotics	2	
MST121	Blueprint Reading	2	
MST134	Hydraulic and Pneumatic Systems <sup>^</sup>	4	MTH022 or MTH023 or Proficiency
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
		18	·
Third Semester			
EET123	Electronic Devices and Circuits	4	EET120 and Pre-Co-EET122
EET128	NEC and Electrical Systems Design	2	EET122
EET227	PLCs and Industrial Controls I	3	EET120 or EST230
MST221	Mechanical Drive Components	3	
ENG221	Technical Report Writing	<u>3</u>	ENG124
		15	
Fourth Semester			
EET126	Electrical Machines	4	Pre-Co-EET122
EET228	PLCs and Industrial Controls II	3	EET227
EST129	Switchgear, Transformers and Controls	2	EET122 or EST230
Arts & Humanities	s Elective <sup>1</sup>	3	Check for prerequisites
PHY121	College Physics I with Algebra (lab)	<u>4</u>	MTH135 or (MTH125 and MTH130) or Proficiency
		16	
	TOTAL CREDITS	64	

<sup>^</sup>Based on SSC placement scores.

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

<sup>&</sup>lt;sup>1</sup>Arts & Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122



# ASSOCIATE OF APPLIED SCIENCE

2024-25 Catalog
Effective Summer 2024

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**4500** 

# HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY

MY ACADEMIC PLAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC121	HVAC Principles I	3		
HVC122	HVAC Principles II	3	Pre-Co-HVC121	
HVC125	Sheet Metal Layout and Fabrication	4		
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	
HVC227	HVAC Field Installation Techniques and Procedures	4	Pre-Co-HVC122	
HVC234	HVAC Electrical Systems and Applications^	3		
TECHNICAL ELE	CTIVES: 6 credit hours minimum			
HVC232	Hydronic Applications and Design	3	HVC122	
HVC235	Refrigeration	3	HVC122	
HVC237	HVAC Commercial Controls	3	HVC122	
HVC238	Chiller Operations	3	HVC122	
	Total	32		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
AIT101	Basic Machines^^	2	Take first semester	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	
MTH107	Industrial Math^	3	Tronciency)	
or	or	or	Check for prerequisites	
MTH125	College Algebra <sup>^</sup> Ω	4	Check for prerequisites	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
COM121	Effective Speaking	3	None	
or	or	or	or	
COM123	Small Group Communication^	3	IDS102 or Proficiency	
	Select one (1) Social & Behavioral Sciences or Arts & Humanities Elective <sup>3</sup>	3	Check for prerequisites	
NON-TECH ELEC	TIVES: 7 credit hours minimum			
CET121	Building Materials and Construction Methods	3		
DET125	Basic AutoCAD	3		
ENV231	OSHA 30-Hour General Industry	2		
MST121	Blueprint Reading	2		
MST126	Pipefitting Principles and Applications	3		
	Total	32-33		
	TOTAL CREDIT HOURS	64-65		

See next page for footnote specifics

Students completing this degree may be eligible to also receive a Heating, Ventilation, Air Conditioning, and Refrigeration Technology – HVACR Technician (Level I) Career Enhancement Certificate (4505), Heating, Ventilation, Air Conditioning, and Refrigeration Technology – HVACR Technician (Level II) Career Enhancement Certificate (4506), and a Heating, Ventilation, Air Conditioning, and Refrigeration Technology One-Year Certificate (4501).

# **2024-25 Catalog**

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# HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY

4500

### 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
AIT101	Basic Machines^^	2	Take first semester
MTH107	Industrial Math^	3	
or	or	or	Check for prerequisites
MTH125 HVC121	College Algebra $^{\wedge}$ $\Omega$ HVAC Principles I	4 3	
HVC121	HVAC Principles II	3	Pre-Co-HVC121
HVC125	Sheet Metal Layout and Fabrication	<u>4</u>	110-00-11 v C121
1110123	Sheet Wetai Layout and I adirection	± 16-17	
Sagand Samastan		10-17	
Second Semester ENG124	Callaga Campacition	2	
	College Composition	3	Co-ENG024 or Co-ENG011 or Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
HVC227	HVAC Field Installation Techniques and Procedures	4	Pre-Co-HVC122
HVC234	HVAC Electrical Systems and Applications^	3	
Non-Technical Ele	ective <sup>2</sup>	<u>2</u>	Check for prerequisites
		15	
Third Semester			
COM121	Effective Speaking	3	
or	or	or	TD 04.00 D 07.1
COM123 HVC222	Small Group Communication	3	IDS102 <b>or</b> Proficiency HVC122
HVC223	HVAC Design and Application HVAC System Operation and Troubleshooting –	3	HVC122
11 v C 2 2 3	Heating	3	11 V C 122
HVC224	HVAC System Operation and Troubleshooting –	3	HVC122
Non-Technical Ele	Cooling	2	Check for prerequisites
	ral Sciences or Arts & Humanities Elective <sup>3</sup>	<u>3</u>	Check for prerequisites
Social & Denavior	at Sciences of Arts & Humanities Elective	<u>-</u> 17	Check for prerequisites
Fourth Semester		17	
	Tarkeriaal Danast Weiking	2	ENG124
ENG221	Technical Report Writing	3	ENG124
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)
Non-Technical Ele	ective <sup>2</sup>	3	Check for prerequisites
Technical Elective	$cs^I$	<u>6</u>	Check for prerequisites
		16	
	TOTAL CREDITS	64-65	

<sup>^</sup>Based on SSC placement scores

<sup>^</sup>To promote student success, this course should be taken in the first semester

ΩMTH125 should only be taken by students planning to transfer to a four-year institution

<sup>&</sup>lt;sup>1</sup>Technical Electives: HVC232, HVC235, HVC237, HVC238

<sup>&</sup>lt;sup>2</sup>Non-technical Electives: CET121, DET125, ENV231, MST121, MST126

<sup>&</sup>lt;sup>3</sup>Social & Behavioral Sciences or Arts & Humanities electives: BUS122 (recommended), BUS221, BUS222, ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222, PHL122 (recommended), PSC121, PSY121, PSY123, PSY124, PSY220, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

# Stark State

# **ONE-YEAR CERTIFICATE**

# **2024-25 Catalog**

Effective Summer 2024

# MAP

# HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY

4501

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC121	HVAC Principles I	3		
HVC122	HVAC Principles II	3	Pre-Co-HVC121	
HVC125	Sheet Metal Layout and Fabrication	4		
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	Pre-Co-HVC122	
HVC234	HVAC Electrical Systems and Applications^	3		
	Total	23		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
AIT101	Basic Machines^^	2	Take first semester	
MST126	Pipefitting Principles and Applications	3		
NON-TECH ELE	CCTIVES: 2 credit hours minimum (choose one)			
CET121	Building Materials and Construction Methods	3		
ENV231	OSHA 30-Hour General Industry	2		
MST121	Blueprint Reading	2		
	Total	8-9		
	TOTAL CREDIT HOURS	31-32		

<sup>^</sup>Based on SSC placement scores

Students completing this degree may be eligible to also receive a Heating, Ventilation, Air Conditioning, and Refrigeration Technology – HVACR Technician (Level I) (4505).

The classes in this certificate also apply toward the completion of a Heating, Ventilation, Air Conditioning, and Refrigeration Technology Degree (4500).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

**2024-25 Catalog** 

### **ONE-YEAR CERTIFICATE**

# HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY

4501

Effective Summer 2024

# 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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	Take first semester
AIT101	Basic Machines^^	2	Take first semester
HVC121	HVAC Principles I	3	
HVC122	HVAC Principles II	3	Pre-Co-HVC121
MST126	Pipefitting Principles and Applications	3	
Non-Technical Elec	ctive <sup>2</sup>	<u>2-3</u>	
		14-15	
Second Semester			
HVC125	Sheet Metal Layout and Fabrication	4	
HVC223	HVAC System Operation and Troubleshooting – Heating	3	HVC122
HVC224	HVAC System Operation and Troubleshooting –	3	HVC122
HVC227	Cooling HVAC Field Installation Techniques and	4	Pre-Co-HVC122
HVC234	Procedures HVAC Electrical Systems and Applications^	<u>3</u>	
		17	
	TOTAL CREDITS	31-32	

<sup>^</sup>Based on SSC placement scores

 $<sup>^{\</sup>sim}$ To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>2</sup>Non-Technical Electives: CET121, ENV231, MST121



# ASSOCIATE OF APPLIED SCIENCE

**2024-25 Catalog** Effective Summer 2024

4556

# **AUTOMATION AND ROBOTICS TECHNOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT121	Industrial Internet of Things (IIoT)	3		Sem./ 1 car
AIT121 AIT139	Introduction to Robotics	2		
AIT139 AIT220	Industrial Robotics	4		
AIT226	Robotic Vision	2	AIT220	
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 or Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co- MTH135) and EET120	
EET227	PLCs and Industrial Controls I	3	EET120 or EST230	
EET228	PLCs and Industrial Controls II	3	EET227	
IET223	Computer Numerical Control	4		
MST221	Mechanical Drive Components	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	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
DET125	Basic AutoCAD	3		
or	or	or		
MST121	Blueprint Reading	2		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3		
or	or	or	ENG124	
ENG231	College Composition II	3		
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
NET121	Introduction to Computer Networking	3		
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	Select one (1) Programming Elective <sup>1</sup>	3	Check for prerequisites	
	Select one (1) Arts & Humanities or Social & Behavioral Sciences Elective <sup>2</sup>	3	Check for prerequisites	
	Total	30-31		
	TOTAL CREDIT HOURS	62-63		

See next page for footnote specifics

Students completing this degree may be eligible to also receive an Industrial Technology – Automation and Robotics Specialist Career Enhancement Certificate (4554) and an Automation and Robotics Technology One-Year Certificate (4555).

# **AUTOMATION AND ROBOTICS TECHNOLOGY**

4556

# 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101 AIT121	Student Success Seminar^^ Industrial Internet of Things (IIoT)	1 3	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
MST221	Mechanical Drive Components	3	Proficiency
WIS1221	Precalculus^ – A student may take MTH125	3	) (TILLOO
MTH135	(College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	<u>5</u>	MTH025 or Proficiency
G 1G		15	
Second Semester AIT139	Introduction to Robotics	2	
			(IDS102 or Proficiency) and
CSE122	Programming Logic and Problem Solving^	3	(ITD100 or Proficiency)
DET125	Basic AutoCAD	3	
or	or	or	
MST121	Blueprint Reading	2	
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135
ENG221	Technical Report Writing	3	
or	or	or	ENG124
ENG231	College Composition II	3	
TEL: 10		14-15	
Third Semester	T 1 (* 10 1 (*	4	
AIT220	Industrial Robotics	4	(D. C. MTH120, D. C.
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co- MTH135) and EET120
EET227	PLCs and Industrial Controls I	3	EET120 or EST230
IET223	Computer Numerical Control	4	
NET121	Introduction to Computer Networking	<u>3</u>	
		18	
Fourth Semester	D 1 4' 37' '	2	A IT220
AIT226 EET228	Robotic Vision PLCs and Industrial Controls II	2 3	AIT220 EET227
EE1220	FLCs and industrial Controls if	3	MTH135 <b>or</b>
PHY121	College Physics I with Algebra (lab)^	4	(MTH125 and MTH130) or Proficiency
	Select one (1) Programming Elective <sup>1</sup>	3	Check for prerequisites
	Select one (1) Arts & Humanities or Social & Behavioral Sciences Elective <sup>2</sup>	<u>3</u>	Check for prerequisites
		15	
	TOTAL CREDITS	62-63	

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup>Programming Electives: AIT221, CSE121, CSE221, CSE229, CSE231, CSE233, CSE235

<sup>&</sup>lt;sup>2</sup>Arts & Humanities or Social & Behavioral Sciences Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122, PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123, SOC221, SOC225

# Stark State

# **ONE-YEAR CERTIFICATE**

# AUTOMATION AND ROBOTICS TECHNOLOGY

**2024-25 Catalog** 

Effective Summer 2024

4555



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT121	Industrial Internet of Things (IIoT)	3		
AIT139	Introduction to Robotics	2		
AIT220	Industrial Robotics	4		
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 or Pre-Co-MTH135	
EET227	PLCs and Industrial Controls I	3	EST230 or EET120	
TECHNICAL EL	ECTIVES: 3 credit hours minimum			
MST221	Mechanical Drive Components	3		
EET228	PLCs and Industrial Controls II	3	EET227	
IET223	Computer Numerical Control	4		
	Total	19-20		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
MST121 or DET125	Blueprint Reading or Basic AutoCAD	2 or 3		
CSE122	Programming Logic & 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	MTH025 or Proficiency	
	Total	11-12		
	TOTAL CREDIT HOURS	30-32		

<sup>^</sup>Based on SSC placement scores.

Students completing this degree may be eligible to also receive an Industrial Technology – Automation and Robotics Specialist Career Enhancement Certificate (4554).

The classes in this certificate also apply toward the completion of an Automation and Robotics Technology Degree (4556).

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

# **ONE-YEAR CERTIFICATE**

# **AUTOMATION AND ROBOTICS TECHNOLOGY**

4555

# 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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisite
SSC101	Student Success Seminar^^	1	Take first semester
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry)	5	MTH025 or Proficiency
AIT139	over two semesters to satisfy this requirement. Introduction to Robotics	2	
AIT121	Industrial Internet of Things (IIoT)	<u>3</u>	
		11	
Second Semester			
AIT220	Industrial Robotics	4	
MST121 or DET125	Blueprint Reading or Basic AutoCAD	2 <b>or</b> 3	
		-	D G 16771125
EET120	DC Circuit Analysis	<u>4</u>	Pre-Co-MTH125 or Pre-Co-MTH135
		10-11	
Third Semester			
EET227	PLCs and Industrial Controls I	3	EST230 or EET120
CSE122	Programming Logic & Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)
Technical Elective <sup>1</sup>		<u>3-4</u>	Check for prerequisites
		9-10	
	TOTAL CREDITS	30-32	

<sup>^</sup>Based on SSC placement scores.

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

<sup>&</sup>lt;sup>1</sup>Technical Electives: EET228, IET223, MST221

# Stark State COLLEGE MY ACADEMIC PLAN

# CAREER ENHANCEMENT CERTIFICATE

# AUTOMOTIVE AFTERMARKET VEHICLE MODIFICATIONS

**2024-25 Catalog**Effective Summer 2024

2259

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
AUT121	Automotive Technical Skills	2		
AUT123	Engine Diagnosis and Major Service	4	AUT121	
AUT124	Vehicle Chassis Systems	4	AUT121	
AUT125	Automotive Electrical and Accessory Systems	4	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	
	TOTAL CREDIT HOURS	26		

# **2024-25 Catalog**

Effective Summer 2024

# CAREER ENHANCEMENT CERTIFICATE

# AUTOMOTIVE AFTERMARKET VEHICLE MODIFICATIONS

2259

# STUDENT ADVISING NOTES

# Academic Advising

Students should make an appointment to see their advisor 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
AUT121	Automotive Technical Skills	2	
AUT123	Engine Diagnosis and Major Service	<u>4</u>	AUT121
		6	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	<u>4</u>	AUT121
		8	
Third Semester			
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	<u>3</u>	AUT124
		12	
	TOTAL CREDITS	26	



# CAREER ENHANCEMENT CERTIFICATE AUTOMOTIVE DETAILING

**2024-25 Catalog** 

Effective Summer 2024

**2260** 

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
AUT130	Automotive Safety and Shop 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	
	TOTAL CREDIT HOURS	16		

# CAREER ENHANCEMENT CERTIFICATE **AUTOMOTIVE DETAILING**

2260

# STUDENT ADVISING NOTES

# Academic Advising

Students should make an appointment to see their advisor 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
AUT130	Automotive Safety and Shop Standards	2	
AUT131	Automotive Detailing Business Practices	2	
AUT132	Automotive Exterior Detailing	<u>3</u>	
		7	
Second Semester			
AUT133	Automotive Interior Detailing	2	AUT132
AUT134	Automotive Under-Hood and Under-Car Detailing	<u>2</u>	AUT132
		4	
Third Semester			
AUT135	Advanced Automotive Detailing Techniques	3	AUT132
AUT136	Practical Automotive Detailing Applications	<u>2</u>	AUT132
		5	
	TOTAL CREDITS	16	

# Stark State COLLEGE MY ACADEMIC PLAN

# **CAREER ENHANCEMENT CERTIFICATE**

# AUTOMOTIVE MAINTENANCE AND LIGHT REPAIR

**2024-25 Catalog**Effective Summer 2024

2261

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
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	
	TOTAL CREDIT HOURS	20		

# **2024-25 Catalog**

Effective Summer 2024

# CAREER ENHANCEMENT CERTIFICATE

# AUTOMOTIVE MAINTENANCE AND LIGHT REPAIR

2261

# STUDENT ADVISING NOTES

# Academic Advising

Students should make an appointment to see their advisor 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
AUT121	Automotive Technical Skills	2	
AUT122	Automotive Systems and Engine Technology	4	AUT121
AUT123	Engine Diagnosis and Major Service	<u>4</u>	AUT121
		10	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
AUT126	Automotive HVAC Systems	<u>2</u>	AUT121
		10	
	TOTAL CREDITS	20	

# Stark State COLLEGE MY ACADEMIC PLAN

# **CAREER ENHANCEMENT CERTIFICATE**

# AUTOMOTIVE TRANSMISSION AND DRIVELINE

**2024-25 Catalog**Effective Summer 2024

2262

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
AUT121	Automotive Technical Skills	2		
AUT122	Automotive Systems and Engine Technology	4	AUT121	
AUT124	Vehicle Chassis Systems	4	AUT121	
AUT125	Automotive Electrical and Accessory Systems	4	AUT121	
AUT223	Advanced Automotive Electronics	3	AUT125	
AUT225	Automotive Drivetrain 1	3	AUT121	
AUT226	Automotive Drivetrain 2	3	AUT121	
AUT227	Computerized Vehicle Control	3	AUT125	
	TOTAL CREDIT HOURS	26		

# CAREER ENHANCEMENT CERTIFICATE

# **AUTOMOTIVE TRANSMISSION AND DRIVELINE**

2262

# STUDENT ADVISING NOTES

# Academic Advising

Students should make an appointment to see their advisor 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
AUT121	Automotive Technical Skills	2	
AUT122	Automotive Systems and Engine Technology	<u>4</u>	AUT121
		6	
Second Semester			
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	<u>4</u>	AUT121
		8	
Third Semester			
AUT223	Advanced Automotive Electronics	3	AUT125
AUT225	Automotive Drivetrain 1	3	AUT121
AUT226	Automotive Drivetrain 2	3	AUT121
AUT227	Computerized Vehicle Control	<u>3</u>	AUT125
		12	
	TOTAL CREDITS	26	



# CAREER ENHANCEMENT CERTIFICATE CAT LIFT TRUCK

2024-25 Catalog Effective Summer 2024

2263

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
AUT121	Automotive Technical Skills	2		
AUT123	Engine Diagnosis and Major Service	4	AUT121	
AUT125	Automotive Electrical and Accessory Systems	4	AUT121	
AUT181	Introduction to CAT Lift Trucks	1	AUT121	
AUT182	CAT Operator Safety Training	1	AUT181	
AUT183	CAT Service Information System	1	AUT181	
AUT184	CAT Hydraulic Systems	1	AUT121	
AUT185	CAT Internal Combustion Engine	2	AUT123	
AUT186	CAT Masts and Lift Mechanisms	1	AUT121	
AUT187	CAT Electrical Systems	3	AUT125	
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	AUT123	
	TOTAL CREDIT HOURS	27		

# CAREER ENHANCEMENT CERTIFICATE CAT LIFT TRUCK

2263

# STUDENT ADVISING NOTES

# Academic Advising

Students should make an appointment to see their advisor 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
AUT121	Automotive Technical Skills	2	
AUT123	Engine Diagnosis and Major Service	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	<u>4</u>	AUT121
		10	
Second Semester			
AUT181	Introduction to CAT Lift Trucks	1	AUT121
AUT182	CAT Operator Safety Training	1	AUT181
AUT183	CAT Service Information System	1	AUT181
AUT184	CAT Hydraulic Systems	1	AUT121
AUT185	CAT Internal Combustion Engine	<u>2</u>	AUT123
		6	
Third Semester			
AUT186	CAT Masts and Lift Mechanisms	1	AUT121
AUT187	CAT Electrical Systems	3	AUT125
AUT188	CAT Steering Systems	1	AUT121
AUT189	CAT Braking Systems	<u>1</u>	AUT121
		6	
Fourth Semester			
AUT281	CAT Differentials and Front Axles	1	AUT121
AUT282	CAT Transmissions	2	AUT121
AUT283	CAT Fuel Systems (LP, Gasoline)	<u>2</u>	AUT123
		5	
	TOTAL CREDITS	27	



# CAREER ENHANCEMENT CERTIFICATE HONDA PACT

**2024-25 Catalog**Effective Summer 2024

2264

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
AUT121	Automotive Technical Skills	2		
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	
AUT171	Introduction To Honda PACT	1	AUT121	
AUT172	Honda Engine Mechanical	2	AUT121	
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	AUT222	
AUT271	Honda Fuel and Emissions System	1	AUT221	
AUT275	Honda Manual Transmissions	1	AUT121	
AUT276	Honda Automatic Transmissions	1	AUT121	
	TOTAL CREDIT HOURS	29		

# CAREER ENHANCEMENT CERTIFICATE HONDA PACT

2264

# STUDENT ADVISING NOTES

# Academic Advising

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

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
AUT121	Automotive Technical Skills	2	
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	4	AUT121
AUT171	Introduction to Honda PACT	1	AUT121
AUT172	Honda Engine Mechanical	<u>2</u>	AUT121
		13	
Second Semester			
AUT221	Fuel and Emission Management Systems	3	AUT125
AUT222	Engine System Performance Diagnosis	3	AUT125
AUT173	Honda Steering and Suspension	1	AUT124
AUT174	Honda Braking Systems	1	AUT124
AUT175	Honda Electrical Systems	2	AUT125
AUT176	Honda HVAC Systems	<u>1</u>	AUT125
		11	
Third Semester			
AUT277	Honda Computerized Engine	2	AUT222
AUT271	Honda Fuel and Emissions System	1	AUT221
AUT275	Honda Manual Transmissions	1	AUT121
AUT276	Honda Automatic Transmissions	<u>1</u>	AUT121
		5	
	TOTAL CREDITS	29	



## CAREER ENHANCEMENT CERTIFICATE TOYOTA T-TEN

**2024-25 Catalog** 

Effective Summer 2024

2265

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
AUT121	Automotive Technical Skills	2		
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	
AUT141	Steering, Suspension, and Braking Operations	2	AUT124	
AUT142	Auto Electrical Systems	2	AUT125	
AUT143	Heating Ventilation and Air Conditioning for Light Vehicles	1	AUT126	
AUT225	Automotive Drivetrain 1	3	AUT121	
AUT226	Automotive Drivetrain 2	3	AUT121	
AUT253	Computerized Engine Control Systems	2	AUT222	
	TOTAL CREDIT HOURS	31		

Effective Summer 2024

### CAREER ENHANCEMENT CERTIFICATE TOYOTA T-TEN

2265

#### STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor 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
AUT121	Automotive Technical Skills	2	
AUT124	Vehicle Chassis Systems	4	AUT121
AUT125	Automotive Electrical and Accessory Systems	<u>4</u>	AUT121
		10	
Second Semester			
AUT126	Automotive HVAC Systems	2	AUT121
AUT142	Auto Electrical Systems	2	AUT125
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT222	Engine Systems Performance Diagnosis	<u>3</u>	AUT125
		10	
Third Semester			
AUT141	Steering, Suspension, and Braking Operations	2	AUT124
AUT143	Heating Ventilation and Air Conditioning for Light Vehicles	1	AUT126
AUT225	Automotive Drivetrain 1	3	AUT121
AUT226	Automotive Drivetrain 2	3	AUT121
AUT253	Computerized Engine Control Systems	<u>2</u>	AUT222
		11	
	TOTAL CREDITS	31	

#### **TOYOTA T-TEN - ELECTRICAL, MANUAL TRANSMISSION, HVAC**

2024-25 Catalog Effective Summer 2024

2266

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
TOY101	Introduction to Toyota T-TEN	3		
TOY102	Toyota Electrical Systems I	5	TOY101	
TOY201	Toyota Electrical Systems II	5	TOY102	
TOY106	Toyota Manual Transmissions and Drivetrains	5	TOY102	
TOY203	Toyota HVAC Systems	5	TOY201	
AUT193	Automotive CO-OP 3	2		
AUT194	Automotive CO-OP 4	2		
	TOTAL CREDIT HOURS	27		

#### **2024-25 Catalog**

Effective Summer 2024

#### CAREER ENHANCEMENT CERTIFICATE

## TOYOTA T-TEN - ELECTRICAL, MANUAL TRANSMISSION, HVAC

2266

#### STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor 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
TOY101	Introduction to Toyota T-TEN	3	
TOY102	Toyota Electrical Systems I	<u>5</u>	TOY101
		8	
Second Semester			
TOY201	Toyota Electrical Systems II	<u>5</u>	TOY102
		5	
Third Semester			
TOY106	Toyota Manual Transmissions and Drivetrains	<u>5</u>	TOY102
		5	
Fourth Semester			
TOY203	Toyota HVAC Systems	5	TOY201
AUT193	Automotive CO-OP 3	<u>2</u>	
		7	
Fifth Semester			
AUT194	Automotive CO-OP 4	<u>2</u>	
		2	
	TOTAL CREDITS	27	

## Stark State COLLEGE NY ACADEMIC PLAN

#### CAREER ENHANCEMENT CERTIFICATE

## TOYOTA T-TEN – ENGINE REPAIR, ENGINE CONTROL, AUTOMATIC TRANSMISSION

**2024-25 Catalog**Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
TOY101	Introduction to Toyota T-TEN	3		
TOY102	Toyota Electrical Systems I	5	TOY101	
TOY104	Toyota Engine Diagnosis and Repair	5	TOY101	
TOY105	Toyota Engine Controls I	5	TOY104	
TOY204	Toyota Engine Controls II	5	TOY105	
TOY205	Toyota Automatic Transmissions	5	TOY204	
	TOTAL CREDIT HOURS	28		

#### **2024-25 Catalog**

Effective Summer 2024

#### CAREER ENHANCEMENT CERTIFICATE

## TOYOTA T-TEN – ENGINE REPAIR, ENGINE CONTROL, AUTOMATIC TRANSMISSION

2267

#### STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor 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
TOY101	Introduction to Toyota T-TEN	3	
TOY102	Toyota Electrical Systems I	<u>5</u>	TOY101
		8	
Second Semester			
TOY104	Toyota Engine Diagnosis and Repair	<u>5</u>	TOY101
		5	
Third Semester			
TOY105	Toyota Engine Controls I	<u>5</u>	TOY104
		5	
Fourth Semester			
TOY204	Toyota Engine Controls II	5	TOY105
TOY205	Toyota Automatic Transmissions	<u>5</u>	TOY204
		10	
	TOTAL CREDITS	28	

## Stark State COLLEGE MY ACADEMIC PLAN

#### CAREER ENHANCEMENT CERTIFICATE

### TOYOTA T-TEN – ELECTRICAL, BRAKES, STEERING AND SUSPENSION

**2024-25 Catalog**Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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
TOY101	Introduction to Toyota T-TEN	3		
TOY102	Toyota Electrical Systems I	5	TOY101	
TOY103	Toyota Steering, Suspension, and Handling	5	TOY102	
TOY201	Toyota Electrical Systems II	5	TOY102	
TOY202	Toyota Automotive Braking Systems	5	TOY201	
AUT191	Automotive CO-OP 1	2		
AUT192	Automotive CO-OP 2	2		
	TOTAL CREDIT HOURS	27		

#### **2024-25 Catalog**

Effective Summer 2024

#### CAREER ENHANCEMENT CERTIFICATE

### TOYOTA T-TEN – ELECTRICAL, BRAKES, STEERING AND SUSPENSION

2268

#### STUDENT ADVISING NOTES

#### **Academic Advising**

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

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
TOY101	Introduction to Toyota T-TEN	3	
TOY102	Toyota Electrical Systems I	5	TOY101
TOY103	Toyota Steering, Suspension, and Handling	5	TOY102
AUT191	Automotive CO-OP 1	<u>2</u>	
		15	
Second Semester			
TOY201	Toyota Electrical Systems II	5	TOY102
TOY202	Toyota Automotive Braking Systems	5	TOY201
AUT192	Automotive CO-OP 2	<u>2</u>	
		12	
	TOTAL CREDITS	27	



### МАР

#### CAREER ENHANCEMENT CERTIFICATE

## MECHANICAL ENGINEERING TECHNOLOGY – DESIGN MAJOR - ADVANCED CAD

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

4003

**2024-25 Catalog** 

Effective Summer 2024

Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
DET125	Basic AutoCAD	3		
DET132	SolidWorks with 3D Printing and Scanning	3	DET125	
DET126	Customizing AutoCAD	3	DET125	
DET131	Pro/ENGINEER (Creo Parametric)	3	DET125	
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125	
	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
SSC101	Student Success Seminar^^	1	Take first semester
DET125	Basic AutoCAD	<u>3</u>	
		4	
Second Semester			
DET132	SolidWorks with 3D Printing and Scanning	3	DET125
DET126	Customizing AutoCAD	3	DET125
DET131	Pro/ENGINEER (Creo Parametric)	3	DET125
DET230	AutoCAD Inventor with 3D Printing and Scanning	<u>3</u>	DET125
		12	
	TOTAL CREDITS	16	

<sup>^^</sup>To promote student success, this course should be taken in the first semester

The classes in this certificate also apply toward the completion of a Mechanical Engineering Technology - Design Major (4058).



## MECHANICAL ENGINEERING TECHNOLOGY – DESIGN MAJOR - AUTOCAD

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes

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MY ACADEMIC PLAN

only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET125	Basic AutoCAD	3		
DET126	Customizing AutoCAD	3	DET125	
DET230	AutoCAD Inventor with 3D Printing and Scanning	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
DET125	Basic AutoCAD	$\frac{3}{3}$	
Second Semester			
DET126	Customizing AutoCAD	3	DET125
DET230	AutoCAD Inventor with 3D Printing and Scanning	<u>3</u>	DET125
		6	
	TOTAL CREDITS	9	

The classes in this certificate also apply toward the completion of a Mechanical Engineering Technology – Design Major (4058).



### MECHANICAL ENGINEERING TECHNOLOGY – MACHINE DESIGN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes

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4056



only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET125	Basic AutoCAD	3		
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
MET226	Technical Project – Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125	
MET228	Machine Design	4	MET124	
MTH135	Precalculus^ - A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	TOTAL CREDIT HOURS	24		

#### STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor 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	
MTH135	Precalculus^ - A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	<u>5</u>	MTH025 or Proficiency
Second Semester		8	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency
MET124	Statics and Strength of Materials	<u>4</u>	Pre-Co-PHY121 or Pre-Co- PHY221
		8	
Third Semester			
MET221	Advanced Strength of Materials	2	MET124
MET226	Technical Project – Mechanical and Design	2	Pre-Co-MET228 and Pre-Co- DET125
MET228	Machine Design	$\frac{4}{8}$	MET124
APara Lau CCC alassassas	TOTAL CREDITS	24	

^Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Mechanical Engineering Technology Degree (4050).



## MECHANICAL ENGINEERING TECHNOLOGY – MECHANICAL POWER

**2024-25 Catalog** 

Effective Summer 2024

4057

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Engineering Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or MTH107	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
MET222	Fluid Power	4	MET124	
MET228	Machine Design	4	MET124	
MTH135	Precalculus^ - A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	TOTAL CREDIT HOURS	25		

#### STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor 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 MTH135	Precalculus <sup>^</sup> - A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	<u>Credit Hours</u> <u>5</u>	<u>Pre- and Co-requisites</u> MTH025 <b>or</b> Proficiency
		5	
Second Semester PHY121	College Physics I with Algebra (lab)^	4	MTH135 <b>or</b> (MTH125 and MTH130) <b>or</b> Proficiency
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221
EST230	Electrical Circuits and Devices^	$\frac{4}{12}$	(MTH025 or Proficiency) or MTH107
Third Semester MET222 MET228	Fluid Power Machine Design	4 4 8	MET124 MET124
	TOTAL CREDITS	25	

<sup>^</sup>Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Mechanical Engineering Technology Degree (4050).



## CIVIL ENGINEERING TECHNOLOGY – ARCHITECTURAL DRAFTING

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

2024-25 Catalog
Effective Summer 2024

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Business, Engineering, and Information Technologies Division

Engineering Technology Department

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		
CET122	Architectural Drafting I	3		
CET123	Architectural Drafting II	3	Co-CET121 and CET122	
CET234	Architectural CAD (REVIT 3D – BIM)	3	CET121 and CET122	
DET125	Basic AutoCAD	3		
	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
SSC101	Student Success Seminar^^	1	Take first semester
CET122	Architectural Drafting I	3	
DET125	Basic AutoCAD	<u>3</u>	
		7	
Second Semester			
CET121	Building Materials and Construction Methods	3	
CET123	Architectural Drafting II	<u>3</u>	Co-CET121 and CET122
		6	
Third Semester			
CET234	Architectural CAD (REVIT 3D – BIM)	<u>3</u>	CET121 and CET122
		3	
	TOTAL CREDITS	16	

<sup>^^</sup>To promote student success, this course should be taken in the first semester

The classes in this certificate also apply toward the completion of a Civil Engineering Technology – Architectural Major (4201).



## CIVIL ENGINEERING TECHNOLOGY – CIVIL/SURVEYING

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

4207



Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET227	Surveying I	3	MTH125 or MTH135	
CET228	Surveying II	3	CET227	
DET125	Basic AutoCAD	3		
CET236	Global Positioning System	3	CET227	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	5	MTH025 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
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	<u>5</u> 5	MTH025 or Proficiency
Second Semester			
CET227	Surveying I	3	MTH125 or MTH135
DET125	Basic AutoCAD	<u>3</u>	
		6	
Third Semester			
CET228	Surveying II	3	CET227
CET236	Global Positioning System	<u>3</u>	CET227
		6	
	TOTAL CREDITS	17	

<sup>^</sup>Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Civil Engineering Technology Degree (4200).



## CIVIL ENGINEERING TECHNOLOGY – CIVIL/SURVEYING DRAFTING

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

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Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials and Construction Methods	3		
CET237	Interpreting Construction Documents	3		
DET125	Basic AutoCAD	3		
	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
CET121	Building Materials and Construction Methods	3	
CET237	Interpreting Construction Documents	3	
DET125	Basic AutoCAD	<u>3</u>	
	TOTAL CREDITS	9	

The classes in this certificate also apply toward the completion of a Civil Engineering Technology – Construction Management Major (4204).



## CIVIL ENGINEERING TECHNOLOGY – CONSTRUCTION MATERIALS INSPECTION

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET121	Building Materials and Construction Methods	3		
CET125	Soil Mechanics	3	(MTH125 or MTH135) and MET124	
CET222	Concrete and Asphalt Testing	3	(MTH125 or MTH135) and CET121	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	TOTAL CREDIT HOURS	22		

#### STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor 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 CET121	Building Materials and Construction Methods	Credit Hours 3	<u>Pre- and Co-requisites</u>
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	<u>5</u>	MTH025 or Proficiency
	sansy this requirement.	8	
Second Semester			
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221
PHY121	College Physics I with Algebra (lab)	<u>4</u>	MTH135 or (MTH125 and MTH130) or Proficiency
		8	,
Third Semester			(2.55.4.2.
CET125	Soil Mechanics	3	(MTH125 or MTH135) <b>and</b> MET124
CET222	Concrete and Asphalt Testing	<u>3</u>	MTH125 or MTH135) and CET121
		6	
^D1 CCC1	TOTAL CREDITS	22	

^Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Civil Engineering Technology Degree (4200), and a Civil Engineering Technology – Construction Management Major (4204).



## CIVIL ENGINEERING TECHNOLOGY – CONSTRUCTION TECHNICIAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes

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Effective Summer 2024

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only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

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		
CET235	Construction Management, Job Cost and Safety	3	CET121 and ITD122 or Proficiency	
CET237	Interpreting Construction Documents	3		
DET125	Basic AutoCAD	3		
ITD122	Computer Applications for Professionals^	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CET121	Building Materials and Construction Methods	3	
CET237	Interpreting Construction Documents	3	
DET125	Basic AutoCAD	3	
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
		13	
Second Semester			
CET235	Construction Management, Job Cost and Safety	$\frac{3}{3}$	CET121 and ITD122 or Proficiency
	TOTAL CREDITS	16	

<sup>^</sup>Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Civil Engineering Technology - Construction Management Major (4204).

<sup>^^</sup>To promote student success, this course should be taken in the first semester



### **2024-25 Catalog**

#### Effective Summer 2024

#### **CIVIL ENGINEERING TECHNOLOGY -Transportation Construction Inspection Level I**

The catalog in force is assigned to students based on the academic year they first applied to the college, and

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changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

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	MTH025 or Proficiency	
CET121	Building Materials and Construction Methods	3		
CET222	Concrete and Asphalt Testing	3	(MTH125 or MTH135) and CET121	
CET225	Sustainable Building Service Systems	3	CET121	
CET227	Surveying I	3	MTH125 or MTH135	
CET235	Construction Management, Job Cost and Safety	3	CET121 and (ITD 100 or Proficiency)	
CET237	Interpreting Construction Documents	3	•	
	TOTAL CREDIT HOURS	23		

<sup>^</sup>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.

First Semester		Credit Hours	Pre- and Co-requisites
CET121	<b>Building Materials and Construction Methods</b>	3	
CET237	Interpreting Construction Documents	3	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	<u>5</u>	MTH025 or Proficiency
		11	
Second Semester			
CET222	Concrete and Asphalt Testing	3	(MTH125 <b>or</b> MTH135) and CET121
CET225	Sustainable Building Service Systems	3	CET121
CET227	Surveying I	3	MTH125 or MTH135
CET235	Construction Management, Job Cost and Safety	<u>3</u>	CET121 and (ITD100 or Proficiency)
		12	
	TOTAL CREDITS	23	

<sup>^</sup>Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Civil Engineering Technology - Construction Management Major (4204).



**2024-25 Catalog** 

Effective Summer 2024

## CIVIL ENGINEERING TECHNOLOGY – Transportation Construction Inspection Level II

4212



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CET122	Architectural Drafting I	3		
or	or	or		
DET125	Basic AutoCAD	3		
CET125	Soil Mechanics	3	(MTH125 or MTH135) and MET124	
CET227	Surveying I	3	MTH125 or MTH135	
CET228	Surveying II	3	CET227	
CET232	Land Planning and Design	3	Pre-Co-CET227 and (CET122 or CET124 or DET125)	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	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	, , , , , , , , , , , , , , , , , , ,	Credit Hours	Pre- and Co-requisites
CET122	Architectural Drafting I	3	<del></del>
or	or	or	
DET125	Basic AutoCAD	3	
MTH125	Precalculus^ – A student may take MTH125 (College	5	MTH025 D £ .:
MTH135	Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	<u>5</u>	MTH025 or Proficiency
	sausjy inis requirement.	8	
Second Semester		-	
CET227	Surveying I	3	MTH125 or MTH135
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221
PHY121	College Physics I with Algebra (lab)	<u>4</u>	MTH135 or (MTH125 and
	5 , 5 ( )		MTH130) or Proficiency
Third Semester		11	
			(MTH125 or MTH135)
CET125	Soil Mechanics	3	and MET124
CET228	Surveying II	3	CET227
CET232	Land Planning and Design	<u>3</u>	Pre-Co-CET227 and (CET122 or
CE1232	Land I lamining and Design		CET124 or DET125)
	MOMAL CONTINUES	9	
AD1 CCC1	TOTAL CREDITS	28	

^Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Civil Engineering Technology Degree (4200).

# Stark State COLLEGE WY ACADEMIC PLAN

#### CAREER ENHANCEMENT CERTIFICATE

## ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – ELECTRICAL/ELECTRONIC TROUBLESHOOTING

**2024-25 Catalog** 

Effective Summer 2024

4408

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

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	MTH025 or Proficiency	
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135) and EET120	
EET123	Electronic Devices and Circuits	4	EET120 <b>and</b> Pre-Co-EET122	
	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 MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry)	<u>Credit Hours</u> 5	Pre- and Co-requisites MTH025 or Proficiency
EET120	over two semesters to satisfy this requirement.  DC Circuit Analysis	<u>4</u>	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135
Second Semester		9	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135) and EET120
EET123	Electronic Devices and Circuits	$\frac{4}{8}$	EET120 and Pre-Co-EET122
ABased on SSC placements	TOTAL CREDITS	17	

^Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Electrical/Electronic Engineering Technology – Electro-Mechanical Major (4101), a Electrical/Electronic Engineering Technology Degree (4100), and an Electrical Maintenance Technology Degree (4404).



**2024-25 Catalog** 

Effective Summer 2024

4409

### **ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – INDUSTRIAL CONTROLS**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135) and EET120	
EET126	Electrical Machines	4	Pre-Co-EET122	
EET227	PLCs and Industrial Controls I	3	EET120 or EST230	
EET228	PLCs and Industrial Controls II	3	EET227	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	5	MTH025 or Proficiency	
	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 EET120	DC Circuit Analysis	<u>Credit Hours</u> 4	Pre- and Co-requisites Pre-Co-MTH125 or Pre-Co-MTH135 MTH025 or Proficiency
MTH135	Precalculus^ - A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	<u>5</u>	,
		9	
Second Semester			
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co- MTH135) and EET120
EET126	Electrical Machines	4	Pre-Co-EET122
EET227	PLCs and Industrial Controls I	<u>3</u>	EET120 or EST230
		11	
Third Semester			
EET228	PLCs and Industrial Controls II	$\frac{3}{3}$	EET227
	TOTAL CREDITS	23	

<sup>^</sup>Based on SSC placement scores

The classes in this certificate also apply toward the completion of an Electrical/Electronic Engineering Technology Degree (4100) and an Electrical Maintenance Technology (4404).



## ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – INDUSTRIAL ELECTRICITY AND ELECTRONICS

**2024-25 Catalog** 

Effective Summer 2024

4410

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

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	MTH025 or Proficiency	
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-MTH135) and EET120	
EET123	Electronic Devices and Circuits	4	EET120 and Pre-Co-EET122	
EET227	PLCs and Industrial Controls I	3	EET120 or EST230	
EET232	Industrial Electronics	4	EET123 and EET227	
EET128	NEC and Electrical Systems Design	2	EET122	
	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
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency
EET120	DC Circuit Analysis	<u>4</u>	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135
		9	
Second Semester			
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 or Pre-Co-
			MTH135) and EET120
EET227	PLCs and Industrial Controls I	3	EET120 or EST230
EET123	Electronic Devices and Circuits	<u>4</u>	EET120 and Pre-Co-EET122
		11	
Third Semester			
EET232	Industrial Electronics	4	EET123 and EET227
EET128	NEC and Electrical Systems Design	<u>2</u>	EET122
		6	
	TOTAL CREDITS	26	
AD 1 000 1			

<sup>^</sup>Based on SSC placement scores

The classes in this certificate also apply toward the completion of an Electrical/Electronic Engineering Technology Degree (4100).

<sup>^</sup>Based on SSC placement scores

#### CAREER ENHANCEMENT CERTIFICATE

#### INDUSTRIAL TECHNOLOGY – CAD/CAM SPECIALIST (COMPUTER-AIDED DRAFTING/COMPUTER-AIDED MACHINING)

**2024-25 Catalog** 

Effective Summer 2024

4316

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT122	Machine Tools	4		
AIT137	CAD/CAM	4	AIT122 and IET223	
AIT221	Advanced CNC Programming	3	IET223 or ARL121 or ARL122	
IET223	Computer Numerical Control	4		
MST121	Blueprint Reading	2		
	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
MST121	Blueprint Reading	2	•
AIT122	Machine Tools	4	
IET223	Computer Numerical Control	<u>4</u>	
		10	
Second Semester			
AIT137	CAD/CAM	4	AIT122 and IET223
AIT221	Advanced CNC Programming	$\frac{3}{7}$	IET223 or ARL121 or ARL122
	TOTAL CREDITS	17	

The classes in this certificate also apply toward the completion of a CNC Technical One-Year Certificate (4308), an Industrial Technology Degree (4300), and an Industrial Technology – Advanced Manufacturing Technology Major (4353)



#### **INDUSTRIAL TECHNOLOGY - MECHANICAL DRIVE SYSTEMS**

**2024-25 Catalog** 

Effective Summer 2024

4318

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT101	Basic Machines	2		
MST121	Blueprint Reading	2		
MST221	Mechanical Drive Components	3		
MST125	Basic Pumps	3		
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency	
MTH107	Industrial Math^	3	(MTH021 or Proficiency) or Pre-Co-MTH007	
	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
AIT101	Basic Machines	2	
MST121	Blueprint Reading	2	
MTH107	Industrial Math <sup>^</sup>	<u>3</u>	(MTH021 or Proficiency) or Pre-Co-
		_	MTH007
		7	
Second Semester			
MST125	Basic Pumps	3	
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency
MST221	Mechanical Drive Components	<u>3</u>	
	•	10	
	TOTAL CREDITS	17	
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^Based on SSC placement scores

The classes in this certificate also apply toward the completion of an Industrial Maintenance One-Year Certificate (4352) an Industrial Technology Degree (4300) and an Industrial Technology – Industrial Maintenance Major (4351).



## INDUSTRIAL TECHNOLOGY – PRECISION MACHINING AND CNC PROGRAMMING

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes

2024-25 Catalog

Effective Summer 2024

4319

only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT122	Machine Tools	4		
AIT123	Advanced Machine Tools	4	AIT122	
IET223	Computer Numerical Control	4		
AIT221	Advanced CNC Programming	3	IET223 or ARL121 or ARL122	
MST121	Blueprint Reading	2		
	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
AIT122	Machine Tools	4	
IET223	Computer Numerical Control	4	
MST121	Blueprint Reading	<u>2</u>	
		10	
Second Semester			
AIT123	Advanced Machine Tools	4	AIT122
AIT221	Advanced CNC Programming	<u>3</u>	IET223 or ARL121 or ARL122
		7	ARL122
	TOTAL CREDITS	17	

The classes in this certificate also apply toward the completion of a CNC Technical One-Year Certificate (4308) and an Industrial Technology Degree (4300).



#### INDUSTRIAL TECHNOLOGY – WELDING TECHNOLOGY AWS\* CERTIFICATION EXAM PREPARATION

2024-25 Catalog
Effective Summer 2024

4320

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

#### GENERAL MIG, TIG, ALUMINUM, AND OXYFUEL WELDING

(GENERAL AWS D1.1 EXAM PREP)

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST127	Principles of Welding◆	6		
	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.

The classes in this certificate also apply toward the completion of an Industrial Maintenance One-Year Certificate (4352), a Welding Technology One-Year Certificate, an Industrial Technology Degree (4300) and an Industrial Technology – Industrial Maintenance Major (4351).

<sup>\*</sup>AWS stands for American Welding Society

<sup>♦</sup>AWS testing available at applicable course completion

# Stark State COLLEGE MY ACADEMIC PLAN

#### CAREER ENHANCEMENT CERTIFICATE

## INDUSTRIAL TECHNOLOGY – 3G AND 4G WELDING CERTIFICATION EXAM PREPARATION

**2024-25 Catalog** 

Effective Summer 2024

4321

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST127	Principles of Welding	6		
MST136	3G and 4G Welding Certification Exam Preparatory#◆	4	MST127	
	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
MST127	Principles of Welding	<u>6</u>	
		6	
Second Semester			
MST136	3G and 4G Welding Certification Exam Preparatory#◆	$\frac{4}{4}$	MST127
	TOTAL CREDITS	10	

<sup>#</sup>Prerequisite of satisfactory welding required prior to course enrollment

The classes in this certificate also apply toward the completion of a Welding Technology One-Year Certificate (4309) and an Industrial Technology Degree (4300).

<sup>♦</sup>AWS testing available at applicable course completion



## INDUSTRIAL TECHNOLOGY – 6G WELDING CERTIFICATION EXAM PREPARATION

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes

**2024-25 Catalog** 

Effective Summer 2024

4322

only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST127	Principles of Welding	6		
MST136	3G and 4G Welding Certification Exam Preparatory#◆	4	MST127	
MST137	6G Welding Certification Exam Preparatory#◆	4	MST136	
	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
MST127	Principles of Welding	<u>6</u>	
0 10		6	
Second Semester MST136	3G and 4G Welding Certification Exam Preparatory#♦	<u>4</u>	MST127
	110pututo15/11V	4	
Third Semester			
MST137	6G Welding Certification Exam Preparatory#◆	<u>4</u>	MST136
		4	
	TOTAL CREDITS	14	

<sup>#</sup>Prerequisite of satisfactory welding required prior to course enrollment

The classes in this certificate also apply toward the completion of a Welding Technology One-Year Certificate (4309) and an Industrial Technology Degree (4300).

<sup>♦</sup>AWS testing available at applicable course completion

#### CAREER ENHANCEMENT CERTIFICATE

## INDUSTRIAL TECHNOLOGY – TUNGSTEN INERT GAS WELDING

2024-25 Catalog

Effective Summer 2024

4324

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST127	Principles of Welding	6		
MST136	3G and 4G Welding Certification Exam Preparatory	4	MST127	
MST138	Preparatory Gas Tungsten Arc Welding#	4	MST127	
MST139	Gas Tungsten Arc Welding◆	3	MST138	
	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
MST127	Principles of Welding	<u>6</u>	
		6	
Second Semester			
MST136	3G and 4G Welding Certification Exam Preparatory	4	MST127
MST138	Preparatory Gas Tungsten Arc Welding#	<u>4</u>	MST127
		8	
Third Semester			
MST139	Gas Tungsten Arc Welding◆	<u>3</u>	MST138
	TOTAL CREDITS	17	

#Prerequisite of satisfactory welding required prior to course enrollment

♦AWS testing available at applicable course completion

The classes in this certificate also apply toward the completion of a Welding Technology One-Year Certificate (4309) and an Industrial Technology Degree (4300).



PIPEFITTING AND WELDING TECHNOLOGY

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28. 4333

**2024-25 Catalog** 

Effective Summer 2024

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MST121	Blueprint Reading	2		
MST126	Pipefitting Principles and Applications	3		
MST127	Principles of Welding	6		
MST136	3G and 4G Welding Certification Exam Preparatory #◆	4	MST127	
MST137	6G Welding Certification Exam Preparatory #◆	4	MST136	
	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	3	
MST127	Principles of Welding	<u>6</u>	
		11	
Second Semester			
MST136	3G and 4G Welding Certification Exam	4	MST127
MST137	Preparatory #♦ 6G Welding Certification Exam Preparatory #♦	4	MST136
141011137	od weiding certification Exam Preparatory #*	8	WISTISO
	TOTAL CREDITS	19	

#Prerequisite of satisfactory welding required prior to course enrollment.

♦AWS testing available at applicable course completion.

The classes in this certificate also apply toward the completion of an Industrial Technology Degree (4300).



## INDUSTRIAL TECHNOLOGY – BASIC INDUSTRIAL MAINTENANCE

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes

**2024-25 Catalog** 

Effective Summer 2024

4407

only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
AIT101	Basic Machines	2		
MTH107	Industrial Math^	3	(MTH021 or Proficiency) or Pre-Co-MTH007	
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or MTH107	
MST121	Blueprint Reading	2		
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
AIT101	Basic Machines	2	
MTH107	Industrial Math^	3	(MTH021 or Proficiency) <b>or</b> Pre-Co-MTH007
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or
MST121	Blueprint Reading	2	MTH107
MST134	Hydraulic and Pneumatic Systems^	<u>4</u>	MTH022 or MTH023 or Proficiency
	TOTAL CREDITS	16	

<sup>^</sup>Based on SSC placement scores

The classes in this certificate also apply toward the completion of an Industrial Technology Degree (4300), an Industrial Technology – Industrial Maintenance Major (4351), an Industrial Maintenance One-Year Certificate (4352), and an Industrial Technology – Advanced Manufacturing Technology Major (4353).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

#### CAREER ENHANCEMENT CERTIFICATE

#### HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY – HVACR TECHNICIAN (LEVEL 1)

2024-25 Catalog
Effective Summer 2024

4505

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC121	HVAC Principles I	3		
HVC122	HVAC Principles II	3	Pre-Co-HVC121	
HVC227	HVAC Field Installation Techniques and Procedures	4	Pre-Co-HVC122	
HVC234	HVAC Electrical Systems and Applications^	3		
	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	Pre-Co-HVC121
HVC227	HVAC Field Installation Techniques and Procedures	4	Pre-Co-HVC122
HVC234	HVAC Electrical Systems and Applications^	<u>3</u>	
	TOTAL CREDITS	13	

<sup>^</sup>Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Heating, Ventilation, Air Conditioning, and Refrigeration Technology One-Year Certificate (4501) and a Heating, Ventilation, Air Conditioning, and Refrigeration Technology Degree (4500)

#### CAREER ENHANCEMENT CERTIFICATE

#### HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY – HVACR TECHNICIAN (LEVEL II)

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

4506

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC121	HVAC Principles I	3		
HVC122	HVAC Principles II	3	Pre-Co-HVC121	
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	3		
	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
HVC121	HVAC Principles I	3	
HVC122	HVAC Principles II	3	Pre-Co-HVC121
MST121	Blueprint Reading	2	
MST126	Pipefitting Principles and Applications	<u>3</u>	
		11	
Second Semester			
HVC222	HVAC Design and Application	3	HVC122
HVC223	HVAC System Operation and Troubleshooting -	3	HVC122
	Heating		
HVC224	HVAC System Operation and Troubleshooting -	<u>3</u>	HVC122
	Cooling		
		9	
	TOTAL CREDITS	20	

The classes in this certificate also apply toward the completion of a Heating, Ventilation, Air Conditioning, and Refrigeration Technology (4500)

#### CAREER ENHANCEMENT CERTIFICATE

## HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY – HVACR COMMERCIAL TECHNICIAN

2024-25 Catalog
Effective Summer 2024

4520

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HVC121	HVAC Principles I	3		
HVC122	HVAC Principles II	3	Pre-Co-HVC121	
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	
HVC232	Hydronic Applications and Design	3	HVC122	
HVC235	Refrigeration	3	HVC122	
HVC237	HVAC Commercial Controls	3	HVC122	
HVC238	Chiller Operations	3	HVC122	
	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		Credit Hours	Pre- and Co-requisites
HVC121	HVAC Principles I	3	
HVC122	HVAC Principles II	<u>3</u>	Pre-Co-HVC121
		6	
Second Semester			
HVC222	HVAC Design and Application	3	HVC122
HVC224	HVAC System Operation and Troubleshooting – Cooling	3	HVC122
HVC235	Refrigeration	3	HVC122
HVC238	Chiller Operations	<u>3</u>	HVC122
		12	
Third Semester			
HVC223	HVAC System Operation and Troubleshooting – Heating	3	HVC122
HVC232	Hydronic Applications and Design	3	HVC122
HVC237	HVAC Commercial Controls	<u>3</u>	HVC122
		9	
	TOTAL CREDITS	27	

The classes in this certificate also apply toward the completion of a HVACR Technology (4500).



## INDUSTRIAL TECHNOLOGY – AUTOMATION AND ROBOTICS SPECIALIST

4554

**2024-25 Catalog** 

Effective Summer 2024

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Industrial Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
EET120	DC Circuit Analysis	4	Pre-Co-MTH135 <b>or</b> Pre-Co-MTH125	
AIT139	Introduction to Robotics	2		
AIT220	Industrial Robotics*	4		
	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
SSC101	Student Success Seminar^^	1	Take first semester
MTH135	Precalculus <sup>^</sup> – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency
EET120	DC Circuit Analysis	4	Pre-Co-MTH135 or Pre-Co-MTH125
AIT139	Introduction to Robotics	<u>2</u>	
		12	
Second Semester			
AIT220	Industrial Robotics*	<u>4</u>	
		4	
	TOTAL CREDITS	16	

<sup>^</sup>Based on SSC placement scores.

The classes in this certificate also apply toward the completion of an Automation and Robotics Technology One-Year Certificate (4555), an Automation and Robotics Technology Degree (4556) and an Electronic/Electronic Engineering Technology Degree (4100).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>FANUC Automation and Robotics certification will be awarded after successfully completing AIT220.



## CAREER ENHANCEMENT CERTIFICATE COMMERCIAL DRIVER'S LICENSE CORE

**2024-25 Catalog** 

Effective Summer 2024

4458

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CDL121	Commercial Driver's License - Class A – Safe Operation and Control*	6		
CDL122	Commercial Driver's License Class A – Advanced Operations and Maintenance	6	CDL121	
	TOTAL CREDIT HOURS	12		

<sup>\*</sup>Participation in CDL121 requires a valid Ohio driver's license. Must be 18 years of age and show proof of legal presence in the United States. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen.

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 CDL122.

# **COMMERCIAL DRIVER'S LICENSE CORE**

4458

#### STUDENT ADVISING NOTES

#### Academic Advising

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

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
CDL121	Commercial Driver's License - Class A – Safe Operation and Control*	6	
CDL122	Commercial Driver's License - Class A – Advanced Operations and Maintenance	<u>6</u>	CDL121
	TOTAL CREDITS	12	

See footnotes on reverse side



# CAREER ENHANCEMENT CERTIFICATE COMMERCIAL DRIVER'S LICENSE (CDL)

**2024-25 Catalog** 

Effective Summer 2024

4460

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CDL121	Commercial Driver's License - Class A – Safe Operation and Control*	6		
CDL122	Commercial Driver's License Class A – Advanced Operations and Maintenance	6	CDL121	
ENV123	OSHA 10-Hour General Industry Safety	1		
ENV124	Transportation Hazardous Material Training	1		
ENV221	OSHA 40-Hour HAZWOPER	2		
	TOTAL CREDIT HOURS	16		

<sup>\*</sup>Participation in CDL121 requires a valid Ohio driver's license. Must be 18 years of age and show proof of legal presence in the United States. Must meet Department of Transportation (DOT) vision and physical requirements and pass the DOT drug screen.

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 CDL122.

# **COMMERCIAL DRIVER'S LICENSE (CDL)**

4460

#### STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor 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	<u>Pre- and Co-requisites</u>
CDL121	Commercial Driver's License - Class A – Safe Operation and Control*	6	
CDL122	Commercial Driver's License - Class A – Advanced Operations and Maintenance	6	CDL121
ENV123	OSHA 10-Hour General Industry Safety	1	
ENV124	Transportation Hazardous Material Training	1	
ENV221	OSHA 40- Hour HAZWOPER	<u>2</u>	
	TOTAL CREDITS	16	

See footnotes on reverse side



# career community:

health

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. 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.



#### ASSOCIATE OF APPLIED SCIENCE



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** Effective Summer 2024

3050

Pre-3051

Health and Public Services Division

Medical Technology Programs Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HIT121	Health Data Management and Delivery Systems ▲-	4	Co-HIT123	
HIT124	Clinical Classification Systems I ▲+	4	HIT121 and Pre-Co-BIO124	
HIT122	Alternative Health Records and Registries ▲+	3	HIT121	
HIT221	Clinical Classification Systems II ▲*	3	HIT124 and BIO222	
HIT222	Healthcare Statistics and Research ▲-	3	HIT124 and Co-HIT224	
HIT223	HIM Supervision Concepts and Practices ▲+	3	HIT224	
HIT224	Quality Management in Healthcare ▲-	2	Co-HIT222	
HIT226	Professional Practice Experience I/Seminar I ▲-	2		
HIT227	Professional Practice Experience II/Seminar II▲+	2		
HIT232	Healthcare Reimbursement Methodologies	2	HIT121	
HIT233	Clinical Classification Systems III ▲*	2	HIT124	
	Total	30		
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 Proficiency	
BIO124	Human Diseases	3	BIO122 or BIO123	
BIO125	Medical Terminology	3		
BIO222	Pharmacology	3	BIO122 or BIO123	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
HIT123	Healthcare Legal and Ethical Issues*▲-	2	HIT230 or Co-HIT121	
HIT229	Health Information Systems and Technology ▲+	3	(HIT224 and ITD122) or CIS126	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MTH124	Statistics ^	3	MTH022 or Pre-Co-MTH024 or Proficiency	
	Psychology or Sociology Elective^l	3	IDS102 or Proficiency	
	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement scores.

#BIO121 and BIO122 can be substituted for BIO123.

- ▲+ Spring only courses. Please see your academic advisor for availability.
- ▲ Fall only courses. Please see your academic advisor for availability.
- ▲\* Summer only courses. Please see your academic advisor for availability.

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.

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

A 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. @"B" or better in BIO101 or High School Biology (must be within 5 years)

<sup>\*</sup>Students in the Health Information Management major are required to take HIT121. HIT230 is required for all other majors.

<sup>&</sup>lt;sup>1</sup> Any Psychology or Sociology course.

**2024-25 Catalog** Effective Summer 2024

# **HEALTH INFORMATION MANAGEMENT**

3050

#### **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 courses must be taken in the order listed below.** 

<u>First Semester</u> SSC101	Student Success Seminar^^	Credit Hours	Pre- and Co-requisites
		1	Take first semester
BIO123	Principles of Human Structure and Function (lab) \(^#\)a	5	BIO101 or Proficiency
HIT121	Health Data Management and Delivery Systems ▲ -	4	Co-HIT123
HIT123	Healthcare Legal and Ethical Issues*▲-	2	HIT230 or Co-HIT121
MTH124	Statistics ^	<u>3</u>	MTH022 <b>or</b> Pre-Co-MTH024 <b>or</b> Proficiency
		15	
Second Semester			
BIO124	Human Diseases	3	BIO122 or BIO123
BIO222	Pharmacology	3	BIO122 or BIO123
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
HIT124	Clinical Classification System I ▲+	4	HIT121 and Pre-Co-BIO124
HIT232	Healthcare Reimbursement Methodologies	<u>2</u>	HIT121
		15	
Summer			
HIT221	Clinical Classification Systems II ▲*	3	BIO222 and HIT124
HIT233	Clinical Classification Systems III ▲*	<u>2</u>	HIT124
		5	
Third Semester			
BIO125	Medical Terminology	3	
HIT222	Healthcare Statistics and Research ▲-	3	HIT124 and Co-HIT224
HIT224 HIT226	Quality Management in Healthcare ▲ - Professional Practice Experience I/Seminar I ▲ -	2 2	Co-HIT222
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
110122	Computer Applications for Frotessionals	13	11D100 of 11oneleney
Fourth Semester		13	
HIT122	Alternative Health Records and Registries ▲+	3	HIT121
HIT223	HIM Supervision Concepts and Practices ▲+	3	HIT224
HIT227	Professional Practice Experience II/ Seminar II ▲+	2	
HIT229	Health Information Systems and Technology ▲+	3	(HIT224 and ITD122) or CIS126
Psychology or Sociology Elective^1		<u>3</u>	IDS102 or Proficiency
		14	
	TOTAL CREDITS	62	

Please see footnotes on page one



#### **ONE-YEAR CERTIFICATE**

**2024-25 Catalog** 

Effective Summer 2024

3055

# MEDICAL CODING CERTIFICATE PROGRAM (MORNING/NIGHT TRACK)

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Pre-3056

Health and Public Services Division

Medical Technology Programs Department

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 <b>or</b> Co-HIT121	
HIT124	Clinical Classification System I ▲+	4	HIT121 and Pre-Co- BIO124	
HIT221	Clinical Classification Systems II ▲ ▲*	3	BIO222 and HIT124	
HIT233	Clinical Classification Systems III ▲ ▲*	2	HIT124	
HIT231	Virtual Professional Practice Experience Coding Lab**▲*	1	HIT124	
HIT232	Healthcare Reimbursement Methodologies ▲+	2	HIT121	
	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 Proficiency	
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		
	10111			

<sup>^</sup>Based upon SSC placement score.

#BIO121 and BIO122 may be substituted for BIO123

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Medical Coding One-Year Certificate – Math requirement not needed

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

<sup>\*</sup>Students in the Health Information Management major are required to take HIT121. HIT230 is required for all other majors.

<sup>\*\*</sup>The coding professional practice experience is on campus in our virtual lab.

<sup>▲</sup> The summer semester courses are accelerated and the schedule is rigorous.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲\*</sup> Summer only courses. Please see your academic advisor for availability.

<sup>@</sup>Application criteria require a "B" or better in HS BIO or BIO101 to apply to the MC program.

2024-25 Catalog

ONE-YEAR CERTIFICATE

MEDICAL CODING CERTIFICATE PROGRAM MORNING/NIGHT PROGRAM

3055

Effective Summer 2024

#### 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 students seeking a one-year certificate.

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 Proficiency
BIO125	Medical Terminology	<u>3</u>	
		15	
Second Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
HIT124	Clinical Classification System I▲+	4	HIT121 <b>and</b> Pre-Co- BIO124
BIO124	Human Diseases	3	BIO122 or BIO123
BIO222	Pharmacology	3	BIO122 or BIO123
HIT232	Healthcare Reimbursement Methodologies ▲+	<u>2</u>	HIT121
		15	
<u>Summer</u>			
HIT221	Clinical Classification Systems II ▲ ▲*	3	BIO222 and HIT124
HIT233	Clinical Classification Systems III ▲ ▲*	2	HIT124
HIT231	Virtual Professional Practice Experience Coding Lab ** ▲ ▲*	<u>1</u>	HIT124
		6	
	TOTAL CREDITS	36	

Please see page one for footnotes



# **ONE-YEAR CERTIFICATE MEDICAL ASSISTING**

# **2024-25 Catalog**

Effective Summer 2024

3105 Pre-3106



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Medical Technology Programs Department

PRE-MEDICAL ASSISTING CREDITS AS LISTED BELOW:				
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO125	Medical Terminology	3		
	TOTAL CREDIT HOURS	3		

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAT100	Medical Assisting I	5	Co-MAT101	
MAT101	Medical Office Procedures	4	Co-MAT100	
MAT102	Medical Assisting II	5	MAT100 and MAT101	
MAT103	Medical Law and Ethics	3		
MAT200	Medical Laboratory Procedures for Medical Assisting	3	MAT102	
MAT201	Insurance for Medical Assisting	3	MAT102	
MAT202	Pharmacology/Administration of Medications	3	MAT102	
MAT203	Medical Assisting III	2	MAT200 and MAT201 and Co-MAT204 and Co-MAT205 and Co-MAT206	
MAT204	Medical Office Management	3	MAT200 and MAT201 and Co-MAT203 and Co-MAT205 and Co-MAT206	
MAT205	Medical Assisting Seminar	1	MAT200 and MAT201 and Co-MAT203 and Co-MAT204 and Co-MAT206	
MAT206	Medical Assisting Practicum	2	MAT200 and MAT201 and Co-MAT203 and Co-MAT204 and Co-MAT205	
	TOTAL CREDIT HOURS	34		

This program requires an application (separate from the College). 2.0 GPA and IDS102 or proficiency for acceptance. Please see your advisor to discuss the application process.

Effective Summer 2024

#### **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 for full-time students who plan to finish in three semesters.

First Semester First 8-Weeks		Credit Hours	Pre- and Co-requisites
MAT100	Medical Assisting I	5	Co-MAT101
MAT101	Medical Office Procedures		Co-MAT100
Second 8-Weeks		$\frac{4}{9}$	
MAT102	Medical Assisting II	5	MAT100 and MAT101
MAT103	Medical Law and Ethics	3	
MAT201	Insurance for Medical Assisting	<u>3</u> 11	MAT102
		11	
Second Semester			
MAT200	Medical Lab Procedures for Medical Assisting	3	MAT102
MAT202	Pharmacology/Administration of Medications	<u>3</u>	MAT102
		6	
Third Semester			
First 8-Weeks	A 6 12 1 4 2 2 2 TT	2	164 T200 1364 T201 1
MAT203	Medical Assisting III	2	MAT200 and MAT201 and
			Co-MAT204 and Co-MAT205
MAT204	M-4:1 Off: M	3	and Co-MAT206 MAT200 and MAT201 and
MAT204	Medical Office Management	3	Co-MAT203 and Co-MAT205
			and Co-MAT206
MAT205	Madical Assisting Sominar	1	MAT200 and MAT201 and
Second 8-Weeks	Medical Assisting Seminar	<u>1</u> 6	Co-MAT203 and Co-MAT204
Second 6- Weeks		U	and Co-MAT206
MAT206	Medical Assisting Practicum	2	MAT200 and MAT201 and
1417 1 1 2 0 0	110diodi 1 issisting i racticum	<b>4</b>	Co-MAT203 and Co-MAT204
			and Co-MAT205
			una co minizos

TOTAL CREDITS 34

This program requires an application (separate from the College).
2.0 GPA and IDS102 or proficiency for acceptance.
Please see your advisor to discuss the application process.



# ASSOCIATE OF APPLIED SCIENCE

## PHYSICAL THERAPIST ASSISTANT

**2024-25 Catalog** Effective Summer 2024

3150 Pre-3151



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Therapy & Wellness Programs Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PTA110	Therapy Sciences	1	Department Chair Approval or Admission to the PTA Program and Co-PTA118	
PTA118	Principles of Patient Care	1	Co-PTA118L and PTA110	
PTA118L	Principles of Patient Care Lab	2	Co-PTA118	
PTA119	Professional Values and Ethics	1	Co-PTA118	
PTA120	Introduction to Orthopedics	2	PHY101 and Co-PTA120L and Co-PTA128	
PTA120L	Introduction to Orthopedics Lab	1	Co-PTA120	
PTA125	Professional Clinical Practice for the PTA	1	PTA119 and Co-PTA138	
PTA128	PTA Procedures I Clinical Interventions	4	PTA110 and PTA118 and Co PTA120	
PTA136	Neurological Foundations for Rehabilitation	1	BIO122 or BIO123	
PTA138	Data Collection	1	PTA128 and Co-PTA125 and Co-PTA138L	
PTA138L	Data Collection Lab	2	Co-PTA138	
PTA223	PTA Procedures III	2	PTA224 and PTA225	
PTA224	PTA Procedures II Ortho	3	EXS120 and PTA120 and BIO124	
PTA225	PTA Procedures II Neuro	3	BIO124 and PTA136 and Co-PTA248	
PTA228	Seminar I	1	PTA125 and Co-PTA247	
PTA230	Seminar II	1	PTA228 and Co-PTA257 and Co-PTA267	
PTA247	Clinical Experience I	1	PTA125 and Co-PTA228	
PTA248	Multisystems	1	PTA138 and Co-PTA225 and Co-PTA248L	
PTA248L	Multisystems Lab	1	Co-PTA248	
PTA257	Clinical Experience II	1	PTA247 and Co-PTA230	
PTA267	Clinical Experience III	2	Co-PTA230	
1111207	Total	33	9011120	
NON-TECH				Completed
Course Number	Course Title	Credits	Pre- and Co-Requisites	Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
BIO123	Principles of Human Structure and Function (lab)#@	5	BIO101 or Proficiency	
BIO124	Human Diseases	3	BIO122 or BIO123	
ENG124	College Composition^	3	Co-ENG024 or ENG011 or Proficiency	
EXS110	Anatomy of Exercise	3	Co-BIO122 or Co-BIO123 and Co-EXS110L	
EXS110L	Anatomy of Exercise Lab	1	Co-EXS110	
EXS120	Exercise Applications	2	EXS110 and Co-EXS120L	
EXS120L	Exercise Applications Lab	1	Co-EXS120	
MTH105	Math for Allied Health ^	3	00 2320120	
0r	or	or	Check for prerequisites	
MTH124	Statistics <sup>^</sup> Ω%	3		
PHY101	Principles of Physics (lab)^*	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY123	Human Growth and Development	3	PSY121	
	Total	32		
	TOTAL CREDIT HOURS	65		

#### PHYSICAL THERAPIST ASSISTANT

3150 Effective Summer 2024

#### 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.

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

ais.			
First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BIO123	Principles of Human Structure and Function (lab)#@	5	BIO101 or Proficiency
EXS110	Anatomy of Exercise	3	Co-BIO122 or Co-BIO123 and Co-EXS110L
EXS110L	Anatomy of Exercise Lab	1	Co-EXS110
PHY101	Principles of Physics (lab)^*	4	(MTH024 or MTH025 or Proficiency) or MTH105 or
			MTH107 and (IDS102 or Proficiency)
PTA110	Therapy Sciences	1	Department Chair Approval or Admission to the
			PTA Program and Co-PTA118
PTA118	Principles of Patient Care	1	Co-PTA118L
PTA118L	Principles of Patient Care Lab	2	Co-PTA118
PTA119	Professional Values and Ethics	<u>1</u>	Co-PTA118
FIAII9	Floressional values and Edites	19	CO-FTATTO
0 10 4		19	
Second Semester			DYO100 DYO100
BIO124	Human Diseases	3	BIO122 or BIO123
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
EXS120	Exercise Applications	2	EXS110 and Co-EXS120L
EXS120L	Exercise Applications Lab	1	Co-EXS120
MTH105	Math for Allied Health ^	3	
or	or	or	Check for prerequisites
MTH124	Statistics <sup>^</sup> Ω%	3	cheen for prerequisites
PTA120		2	PHY101 and Co-PTA120L and Co-PTA128
	Introduction to Orthopedics		
PTA120L	Introduction to Orthopedics Lab	1	Co-PTA120
PTA128	PTA Procedures I Clinical Interventions	<u>4</u>	PTA110 and PTA118 and Co PTA120
		19	
Third Semester			
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
PTA125	Professional Clinical Practice for the PTA	1	PTA119 and Co-PTA138
PTA136	Neurological Foundations for Rehabilitation	1	BIO122 or BIO123
PTA138	Data Collection	1	PTA128 and Co-PTA125 and PTA138L
PTA138L	Data Collection Lab	<u>2</u>	Co-PTA138
		=	
		8	
Fourth Semester		Ü	
PSY123	Human Growth and Development	3	PSY121
PTA224	PTA Procedures II Ortho	3	EXS120 and PTA120 and BIO124
PTA225	PTA Procedures II Neuro	3	
			BIO124 and PTA136 and Co-PTA248
PTA228	Seminar I	1	PTA125 and Co-PTA247
PTA247	Clinical Experience I	1	PTA125 and Co-PTA228
PTA248	Multisystems	1	PTA138 and Co-PTA225 and Co-PTA248L
PTA248L	Multisystems Lab	<u>1</u>	Co-PTA248
		13	
Fifth Semester			
PTA223	PTA Procedures III	2	PTA224 and PTA225
PTA230	Seminar II	1	PTA228 and Co-PTA257 and Co-PTA267
PTA257	Clinical Experience II	1	PTA247 and Co-PTA230
PTA267	Clinical Experience III	<u>2</u>	Co-PTA230
1111201	Chinesi Experience III	<u>2</u> 6	001111230
	TOTAL CREDITS	65	
	TOTAL CREDITS	US	

<sup>^</sup>Based on SSC placement scores.

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

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

<sup>@&</sup>quot;B" or better in BIO101 or High School Biology (must be within 5 years).

<sup>#</sup>BIO121 and BIO122 can be substituted for BIO123.

 $<sup>\</sup>Omega$  MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

<sup>%</sup>MTH125 College Algebra can be substituted for MTH124.

<sup>\*</sup>PHY121 and PHY122 can be substituted for PHY101.



# MAP

## ASSOCIATE OF APPLIED SCIENCE

# **RESPIRATORY CARE**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to

Policy No. 3357:15-13-28.

Effective Summer 2024

**3200** 

**2024-25 Catalog** 

Pre-3202

Health and Public Services Division

Respiratory, Laboratory, and Surgical Technology Dept.

PRE-RESPIRATORY CARE CREDITS AS LISTED BELOW:						
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
MTH105	Math for Allied Health^	3	MTH021 or Pre-Co-MTH005 or Proficiency			
BIO123	Principles of Human Structure and Function (lab) #	5	BIO101 or Proficiency			
	TOTAL CREDIT HOURS	8				

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
RCT121	Introduction to Respiratory Care ▲-	2	Pre-Co-BIO122 or BIO123 and Co-RCT121L	
RCT121L	Introduction to Respiratory Care Laboratory ▲-	1	Co-RCT121	
RCT122	Medical Gas Administration ▲-	2	Co-RCT122L	
RCT122L	Medical Gas Administration Laboratory ▲-	1	Co-RCT122	
RCT124	Respiratory Care Pharmacology ▲-	2		
RCT123	Airway Management Procedures ▲+	2	RCT124 and Co-RCT123L	
RCT123L	Airway Management Procedures Laboratory ▲+	1	Co-RCT123	
RCT125C	Practicum I Clinical ▲+	2	RCT124 and Co-RCT125	
RCT125	Practicum I Seminar ▲+	1	Co-RCT125C	
RCT126	Critical Care ▲*	2	RCT123 and Co-RCT126L	
RCT126L	Critical Care Laboratory ▲*	1	Co-RCT126	
RCT128C	Practicum II Clinical ▲*	1	RCT123 and RCT125C and Co-RCT128	
RCT128	Practicum II Seminar ▲*	1	Co-RCT128C	
RCT224C	Practicum III Clinical ▲-	2	RCT126 and RCT128C and Co-RCT224	
RCT224	Practicum III Seminar ▲-	1	Co-RCT224C	
RCT226	Advanced Respiratory Care Procedures Laboratory ▲-	1	RCT126	
RCT227	Neonatal/Pediatrics for Respiratory Care ▲-	2	RCT126 and Co-RCT227L	
RCT227L	Neonatal/Pediatrics for Respiratory Care Laboratory ▲-	1	Co-RCT227	
RCT223	Patient Assessment and Monitoring ▲+	3	RCT220	
RCT225C	Practicum IV Clinical ▲+	3	RCT224C and RCT226 and RCT227 and (Co- RCT225 and Co-RCT225L)	
RCT225	Practicum IV Seminar ▲+	1	Co-RCT225C and Co-RCT225L	
RCT225L	Practicum IV Laboratory ▲+	1	Co-RCT225C and Co-RCT225	
	TOTAL	34		

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	Co-ENG024 or Co-ENG011 or Proficiency	
BIO125	Medical Terminology	3		
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
RCT129	Respiratory Diseases ▲+	3	RCT124	
RCT220	Cardiopulmonary A & P▲-	4	(BIO122 or BIO123) and RCT126	
	Psychology or Sociology Elective^^^	3	Check for prerequisites	
	Total	21		
	TOTAL CREDIT HOURS	63		

<sup>^</sup>Based on SSC placement scores.

- ▲+ Spring only courses. Please see your academic advisor for availability.
- ▲ Fall only courses. Please see your academic advisor for availability.
- **▲\*** Summer only courses. Please see your academic advisor for availability.

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.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

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

<sup>^^^</sup>Choose Psychology or Sociology elective.

<sup>#</sup> BIO121 and BIO122 can be substituted for BIO123

3200

Effective Summer 2024

#### FULL-TIME STUDENT ADVISING NOTES

#### Academic Advising

Each student should make an appointment to see their advisor every semester before registering for classes. Please have your registration form completed, including the courses you wish to take, for this meeting.

#### Course Sequence

The semester-by-semester listing below gives the normal scheduling option for full-time associate degree students who plan to finish in two years. Some courses can be scheduled as beginning courses in <u>other</u> semesters depending upon course availability and advisor's recommendation. Respiratory Care courses must be taken in the order listed below.

	piratory Care courses must be taken in the order listed below		
<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
RCT121	Introduction to Respiratory Care ▲-	2	Pre-Co-BIO122 or BIO123
			and Co-RCT121L
RCT121L	Introduction to Respiratory Care Laboratory ▲-	1	C DOTTIAL
D.CT122	M 1 10 A1 11 A	2	Co-RCT121
RCT122	Medical Gas Administration ▲-	2	Co-RCT122L
RCT122L	Medical Gas Administration Laboratory ▲-	1	Co-RCT122
RCT124	Respiratory Care Pharmacology ▲-	2	
BIO125	Medical Terminology	<u>3</u>	
		12	
Casand Camastan		12	
Second Semester	C-11 C	2	Co-ENG024 or Co-ENG011 or
ENG124	College Composition^	3	Proficiency
D.CT122	A' 36 (D. 1. A)	2	
RCT123	Airway Management Procedures ▲+	2	RCT124 and Co-RCT123L
RCT123L	Airway Management Procedures Laboratory ▲+	1	Co-RCT123
RCT125	Practicum I Seminar ▲+	1	Co-RCT125C
RCT125C	Practicum I Clinical ▲+	2	RCT124 and Co-RCT125
RCT129	Respiratory Diseases ▲+	3	RCT124
		12	
<u>Summer</u>			
RCT126	Critical Care ▲*	2	RCT123 and Co-RCT126L
RCT126L	Critical Care Laboratory ▲ *	1	Co-RCT126
RCT128	Practicum II Seminar ▲*	1	Co-RCT128C
RCT128C	Practicum II Clinical ▲*	<u>1</u>	RCT123 and RCT125C and
		_	Co-RCT128
		5	
Third Semester			
	ciology Elective^^^	3	Check for Pre-requisites
RCT220	Cardiopulmonary A&P ▲-	4	(BIO122 or BIO123) and RCT126
RCT224	Practicum III Seminar ▲-	1	Co-RCT224C
RCT224C	Practicum III Clinical ▲-	2	RCT126 and RCT128C and
RCT226	Advanced Descriptory Care Dresedures Laboratory	1	Co-RCT224 RCT126
RCT227	Advanced Respiratory Care Procedures Laboratory A-	1	RCT126 RCT126 and Co-RCT227L
	Neonatal/Pediatrics for Respiratory Care ▲-	2	Co-RCT227 Co-RCT227
RCT227L	Neonatal/Pediatrics for Respiratory Care	1	C0-RC122/
	Laboratory ▲-	14	
Fourth Semester			DV0100 DV0100 DV0100
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127
D.CT222	D 4' 4 A 4 1 1 1 A 4	2	or BIO141
RCT223	Patient Assessment and Monitoring ▲+	3	RCT220
RCT225	Practicum IV Seminar ▲+	1	Co-RCT225C and Co-RCT225L
RCT225L	Practicum IV Laboratory ▲+	1	Co-RCT225C and Co-RCT225 RCT224C and RCT226 and RCT227
RCT225C	Practicum IV Clinical ▲+	<u>3</u>	and (Co-RCT225 and
		12	Co-RCT225L)
	TOTAL CREDITS	63	20 12012202)
		~ <b>~</b>	



# ASSOCIATE OF APPLIED SCIENCE

# OCCUPATIONAL THERAPY ASSISTANT The catalog in force is assigned to students based on the academic year they first applied to the college, and changes

only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog**Effective Summer 2024

3250

Pre-3251



Health and Public Services Division

Occupational Therapy Assistant Department

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 Pre-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 OTA124 and Co-OTA222 and Pre-Co-PTA226 and Pre-Co-OTA223	
OTA222	Developmental Clinical Experience	3	(BIO123 or BIO122) and OTA123 and OTA124 and Co-OTA221 and Pre-Co-PTA226 and Pre-Co-OTA223	
OTA224	OT in Physical Dysfunction	4	OTA221 and OTA222 and Co-OTA225 and Pre-Co-BIO124	
OTA225	Physical Dysfunction Clinical Experience	3	OTA222 and OTA221 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 and Co-OTA228	
OTA228	Clinical Application II	3	OTA224 and OTA225 and Co-OTA226 and Co-OTA227	
	Total	35		
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 & Function (lab)#@	5	BIO101 or Proficiency	
BIO124	Human Diseases	3	BIO122 or BIO123	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
OTA223	Life Span Development	5	ENG124	
MTH124 <b>or</b> MTH105	Statistics^ Ω or Math for Allied Health	3 <b>or</b> 3	Check for prerequisites	
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY221	Abnormal Psychology	3	PSY121 and Co-OTA123	
PTA226	Functional Anatomy	4	BIO122 or BIO123	
	Total	30		
	TOTAL CREDIT HOURS	65		

<sup>^</sup>Based on SSC placement scores.

<sup>^^</sup>To promote student success, this course must be taken in the first semester.

<sup>@&</sup>quot;B" or better in BIO101 or High School Biology (must be within 5 years).

<sup>#</sup>BIO121 and BIO122 can be substituted for BIO123

 $<sup>\</sup>Omega$  MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

**2024-25 Catalog** Effective Summer 2024

# **OCCUPATIONAL THERAPY ASSISTANT**

3250

## 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
OTA121	Foundations of Occupational Therapy	3	Co-OTA122
OTA122	Therapeutic Media	3	Co-OTA121
ENG124	College Composition^	3 13	Co-ENG024 or Co-ENG011 or Proficiency
		13	
Second Semester			
MTH124	Statistics <sup>^</sup> Ω	3	Check for Pre-requisites
or	or	or	Check for 1 re-requisites
MTH105	Math for Allied Health	3	
BIO123	Principles of Human Structure and Function	5	BIO101 or Proficiency
-	(lab)#@		, and the second
OTA123	Psychosocial Aspects in OT	4	OTA121 and OTA122 and PSY121
	J		and Co-OTA124 and Pre-or-Co-PSY221
OTA124	Psychosocial Clinical Experience	3	OTA121 and OTA122 and Co-OTA123
PSY221	Abnormal Psychology	<u>3</u>	PSY121 and Co-OTA123
	, 2,	18	
Third Semester			
OTA221	Developmental Aspects in OT	4	(BIO123 or BIO122) and OTA123
	•		and OTA124 and Co-OTA222 and
			Pre-Co-PTA226 and Pre-Co-OTA223
OTA222	Developmental Clinical Experience	3	(BIO123 or BIO122) and OTA123
	1		and OTA124 and Co-OTA221 and
			Pre-Co-PTA226 and Pre-Co-OTA223
OTA223	Life Span Development	5	ENG124
PTA226	Functional Anatomy	4	BIO122 or BIO123
	ř	5 <u>4</u> <b>16</b>	
Fourth Semester			
BIO124	Human Diseases	3	BIO122 or BIO123
OTA224	OT in Physical Dysfunction	4	OTA221 and OTA222 and Co-OTA225
	, ,		and Pre-Co-BIO124
OTA225	Physical Dysfunction Clinical Experience	<u>3</u>	OTA221 and OTA222 and Co-OTA224
		10	
Fifth Semester			
OTA226	OTA Seminar	2	OTA224 and OTA225 and
			Co-OTA227 and Co-OTA228
OTA227	Clinical Application I	3	OTA224 and OTA225 and Co-OTA226 and
			Co-OTA228
OTA228	Clinical Application II	<u>3</u>	OTA224 and OTA225 and Co-OTA226 and
			Co-OTA227
		8	
	TOTAL CREDITS	65	

See page one for footnotes



# ASSOCIATE OF APPLIED SCIENCE

## MEDICAL LABORATORY TECHNOLOGY



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

3300

Pre-3301

Health and Public Services Division

Respiratory, Laboratory, and Surgical Technology Dept.

PRE-MEDICAL LABORATORY CREDITS AS LISTED BELOW:						
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency			
	TOTAL CREDIT HOURS	3				
TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
MLT121	Fundamentals of Laboratory Techniques ▲-	2				
MLT122	Urinalysis and Body Fluids ▲*	3	MLT124			
MLT123	Hematology I▲-	3				
MLT124	Hematology II ▲+	3	MLT123			
MLT125	Immunohematology ▲+	5	MLT121 and MLT126			
MLT126	Immunology/Serology ▲-	3				
MLT223	Clinical Microbiology ▲ -	5	BIO221 and MLT126			
MLT225	MLT Applications ▲ +	3	MLT125 and MLT222 and MLT223			
MLT226	MLT Directed Practice ▲+	6	MLT225 and Co-MLT227			
MLT227	MLT Seminar ▲+	1	MLT223 and MLT225 and Co-MLT226			
	Total	34				
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 & Function (lab) ▲#@	5	BIO101 or Proficiency			
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141			
CHM123	General, Organic, and Biological Chemistry^	4	(MTH024 or MTH025 or proficiency) or MTH105 or MTH107 or (CHM101 or proficiency)			
CHM243	Biochemistry I	3	CHM123 or CHM 141			
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency			
MLT222	Clinical Chemistry ▲-	4	(BIO122 or BIO123) and Pre-Co- CHM243 and MLT121 and MLT122			
				•		
	Social and Behavioral Sciences Elective*	3	Check for prerequisites			
	Social and Behavioral Sciences Elective*  Total	3 <b>27</b>	Check for prerequisites			

<sup>^</sup>Based on SSC placement scores.

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.

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

<sup>@&</sup>quot;B" or better in BIO101 or High School Biology (must be within 5 years).

<sup>#</sup> BIO121 and BIO122 can be substituted for BIO123

A 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.

\*Choose from sociology or psychology offerings

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

<sup>▲\*</sup> Summer only courses. Please see your academic advisor for availability.

**2024-25 Catalog** 

# **MEDICAL LABORATORY TECHNOLOGY**

3300

Effective Summer 2024

# 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.

<u>Pre-Medical</u> Laboratory Courses		Credit Hours	Pre- and Co-requisites
MTH124	Statistics^	<u>3</u>	MTH022 or Pre-Co-MTH024 or Proficiency
		3	
<u>First Semester</u>		Credit Hours	<u>Pre- and Co-requisites</u>
SSC101	Student Success Seminar^^	1	Take first semester
BIO123	Principles of Human Structure & Function (lab) \(^{\pm} \)	5	BIO101 or Proficiency
MLT121	Fundamentals of Laboratory Techniques ▲-	2	
MLT126	Immunology/Serology ▲ -	3 3 14	
MLT123	Hematology I▲-	<u>3</u>	
C1 Ct		14	
Second Semester CHM123	General, Organic, and Biological Chemistry^	4	(MTH024 or MTH025 or proficiency) or MTH105 or MTH107 or (CHM101 or proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MLT124	Hematology II ▲+	3	MLT123
MLT125	Immunohematology ▲+	<u>5</u>	MLT121 and MLT126
		15	
Third Semester BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141
MLT122	Urinalysis and Body Fluids ▲*	$\frac{3}{7}$	MLT124
Fourth Semester		•	
CHM243	Biochemistry I	3	CHM123 or CHM 141
MLT222	Clinical Chemistry ▲ -	4	(BIO122 or BIO123) and Pre-Co- CHM243 and MLT121 and MLT122
MLT223	Clinical Microbiology ▲-	<u>5</u>	BIO221 and MLT126
	67	12	
Fifth Semester			
Social and Behavior	al Sciences Elective*	3	Check for prerequisites
MLT225	MLT Applications ▲+	3	MLT125 and MLT222 and MLT223
MLT226	MLT Directed Practice ▲+	6	MLT225 and Co-MLT227
MLT227	MLT Seminar ▲+	<u>1</u>	MLT223 and MLT225
			and Co-MLT226
		13	
	TOTAL CREDITS	64	

Please see page one for footnotes



#### **ONE-YEAR CERTIFICATE**

# **PRACTICAL NURSING – Day Program**

2024-25 Catalog

Effective Summer 2024

3357 Pre-3375

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing.

Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Nursing Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PNC100	Nursing 1	4	Admission to program and (Co-BIO101 and Co-PNC101)	
PNC120	Nursing 2	5	PNC100 and PNC101 and Co-BIO101 and Co-PNC121	
PNC130	Nursing 3	9	PNC120 and PNC121	
PNC140	Nursing 4	8	PNC130	
PNC101	Pharmacology 1	3	Admission to program and Co-BIO101 and Co-PNC100	
PNC121	Pharmacology 2	3	PNC100 and PNC101 and Co-BIO101 and Co-PNC120	
	Total	32		
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	
	Total	4		
	TOTAL CREDIT HOURS	36		

<sup>^</sup>Based on SSC placement score.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

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

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# **PRACTICAL NURSING – Day Program**

3357

#### Academic Advising

Students should make an appointment to see their advisor 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.

<u>First Semester</u>		Credit Hours	<u>Pre- and Co-requisites</u>
BIO101	Intro to Anatomy and Physiology^	3	IDS102 or Proficiency
SSC101	Student Success Seminar^^	1	Take first semester
First Semester—	-First 8 Weeks		
PNC100	Nursing 1	4	Admission to program and (Co-BIO101 and Co-PNC101)
PNC101	Pharmacology 1	3	Admission to program and Co-BIO101 and Co-PNC100
First Semester—	-Second 8 Weeks		
PNC120	Nursing 2	5	PNC100 and PNC101 and Co-BIO101 and Co-PNC121
PNC121	Pharmacology 2	<u>3</u>	PNC100 and PNC101 and Co-BIO101 and Co-PNC120
		19	and Co-1 NC120
Second Semeste	r—First 8 Weeks		
PNC130	Nursing 3	9	PNC120 and PNC121
Second Semeste	er—Second 8 Weeks		
PNC140	Nursing 4	<u>8</u>	PNC130
		17	
	TOTAL CREDITS	36	

Please see footnotes on page one



## ASSOCIATE OF APPLIED SCIENCE

## **CONCEPT-BASED NURSING**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when

students change their major or request the change in writing.

Refer to Policy No. 3357:15-13-28.

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Pre-3361

Health and Public Services Division

Nursing Department

## A student cannot register for NSG courses until accepted into the program.

PRE-NURSING CREDITS AS LISTED BELOW:						
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
SSC101	Student Success Seminar^^	1	Take first semester			
MTH124	Statistics^	3	MTH022 <b>or</b> Pre-Co-MTH024 <b>or</b> Proficiency			
BIO101	Introduction to Anatomy and Physiology	3	IDS102 or Proficiency			
PSY121	General Psychology^	3	IDS102 or Proficiency			
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency			
	TOTAL CREDIT HOURS	13				

See last page for footnotes

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NSG100	Fundamental Concepts of Nursing Practice Across the Lifespan (lecture)	3	Admission to Program and Co-NSG100L and Co-NSG100C and Co-NSG101	
NSG100L	Fundamental Concepts of Nursing Practice Across the Lifespan (lab)	1	Admission to Program and Co-NSG100 and Co- NSG100C and Co-NSG101	
NSG100C	Fundamental Concepts of Nursing Practice Across the Lifespan (clinical)	2	Admission to Program and Co-NSG100 and Co- NSG100L and Co-NSG101	
NSG101	Clinical Reasoning in Current Nursing Practice	2	(Co-NSG100 and Co-NSG100L and Co-NSG100C) or (Co-NSG122 and Co-NSG122L and Co-NSG122C) or (Co-NSG123 and Co-NSG123L and Co-NSG123C)	
NSG121	Concepts of Nursing Practice in the Care of Adult Patients with Uncomplicated Conditions (lecture)	2	(BIO121 or BIO123) and NSG100 and NSG100L and NSG100C and NSG101 and Co- NSG121L and Co-NSG121C	
NSG121L	Concepts of Nursing Practice in the Care of Adult Patients with Uncomplicated Conditions (lab)	0.5	(BIO121 or BIO123) and NSG100 and NSG100L and NSG100C and NSG101 and Co- NSG121 and Co-NSG121C	
NSG121C	Concepts of Nursing Practice in the Care of Adult Patients with Uncomplicated Conditions (clinical)	1.5	(BIO121 or BIO123) and NSG100 and NSG100L and NSG100C and NSG101 and Co- NSG121 and Co-NSG121L	
NSG141	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (lecture)	1.5	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co- NSG141L and Co-NSG141C	
NSG141L	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (lab)	0.5	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co- NSG141 and Co-NSG141C	

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# **CONCEPT-BASED NURSING**

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TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NSG141C	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (clinical)	1	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141 and Co-NSG141L	
NSG221	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (lecture)	2.5	NSG141 and NSG141L and NSG141C and Co-NSG221L and Co-NSG221C	
NSG221L	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (lab)	0.5	NSG141 and NSG141L and NSG141C and Co-NSG221 and Co-NSG221C	
NSG221C	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (clinical)	1	NSG141 and NSG141L and NSG141C and Co-NSG221 and Co-NSG221L	
NSG241	Concepts of Nursing Practice in the Care of Adult Patients with Stable and Unstable Acute Conditions (lecture)	3	BIO122 and NSG141 and NSG141L and NSG141C and Co-NSG241L and Co-NSG241C	
NSG241L	Concepts of Nursing Practice in the Care of Adult Patients with Stable and Unstable Acute Conditions (lab)	0.5	BIO122 and NSG141 and NSG141L and NSG141C and Co-NSG241 and Co-NSG241C	
NSG241C	Concepts of Nursing Practice in the Care of Adult Patients with Stable and Unstable Acute Conditions (clinical)	1.5	BIO122 and NSG141 and NSG141L and NSG141C and Co-NSG241 and Co-NSG241L	
NSG261	Concepts of Nursing Practice in the Care of Patients Across the Lifespan with Complex Conditions (lecture)	5	BIO221 and PSY123 and NSG221 and NSG221L and NSG221C and NSG241 and NSG241L and NSG241C and Co-NSG261L and Co-NSG261C	
NSG261L	Concepts of Nursing Practice in the Care of Patients Across the Lifespan with Complex Conditions (lab)	1	BIO221 and PSY123 and NSG221 and NSG221L and NSG221C and NSG241 and NSG241L and NSG241C and Co-NSG261 and Co-NSG261C	
NSG261C	Concepts of Nursing Practice in the Care of Patients Across the Lifespan with Complex Conditions (clinical)	3	BIO221 and PSY123 and NSG221 and NSG221L and NSG221C and NSG241 and NSG241L and NSG241C and Co-NSG261 and Co-NSG261L	
	Total	33		
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 BIO127 or BIO141	
PSY123	Human Growth and Development	3	PSY121	
SOC121	Sociology^	3	IDS102 or Proficiency	
	Total	18		
	TOTAL CREDIT HOURS	64		

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# **CONCEPT BASED NURSING**

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#### 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.

#### A student cannot register for NSG courses until accepted into the program.

Pre-Nursing Courses SSC101 MTH124 BIO101 PSY121 ENG124	Student Success Seminar^^ Statistics^ Introduction to Anatomy and Physiology General Psychology^ College Composition^	Credit Hours  1
<u>First Semester</u>		
BIO121	Anatomy and Physiology I (lab)	4 BIO101 or Proficiency
NSG100	Fundamental Concepts of Nursing Practice	Admission to Program and Co-
NGG100I	Across the Lifespan (lecture)	NSG100L and Co-NSG100C and Co-NSG101
NSG100L	Fundamental Concepts of Nursing Practice	1 Admission to Program and Co-
NSG100C	Across the Lifespan (lab) Fundamental Concepts of Nursing Practice	NSG100 and Co-NSG100C and Co-NSG101 2 Admission to Program and Co-
NSG100C	Across the Lifespan (clinical)	NSG100 and Co-NSG100L and Co-NSG101
NSG101	Clinical Reasoning in Current Nursing Practice	2 (Co-NSG100 and Co-NSG100L and Co-
NSGIVI	Clinical Reasoning in Current Pursing Fluence	NSG100C) or (Co-NSG122 and Co-NSG122L and Co-NSG122C) or (Co-NSG123 and Co-NSG123L and Co-NSG123C)
		12
Second Semester		
NSG121	Concepts of Nursing Practice in the Care of	2 (BIO121 or BIO123) and NSG100 and
	Adult Patients with Uncomplicated Conditions (lecture)	NSG100L and NSG100C and NSG101 and Co-NSG121L and Co-NSG121C
NSG121L	Concepts of Nursing Practice in the Care of	0.5 (BIO121 or BIO123) and NSG100 and
	Adult Patients with Uncomplicated Conditions (lab)	NSG100L and NSG100C and NSG101 and Co-NSG121 and Co-NSG121C
NSG121C	Concepts of Nursing Practice in the Care of	1.5 (BIO121 or BIO123) and NSG100 and
1,561210	Adult Patients with Uncomplicated Conditions (clinical)	NSG100L and NSG100C and NSG101 and Co-NSG121 and Co-NSG121L
BIO122	Anatomy and Physiology II (lab)	4 BIO121 or BIO123
PSY123	Human Growth and Development	3 PSY121
NSG141	Concepts of Nursing Practice in the Care	1.5 (BIO121 or BIO123) and
	of Patients with Mental Illness Issues (lecture)	(NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141L and Co-NSG141C
NSG141L	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (lab)	0.5 (BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141 and Co-NSG141C

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#### **CONCEPT BASED NURSING**

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NSG141C	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (clinical)	<u>1</u> 14	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141 and Co-NSG141L
Third Semester			
NSG221	Concepts of Nursing Practice in the Care of the	2.5	NSG141 and NSG141L and NSG141C
NSG221L	Reproducing and Developing Family (lecture) Concepts of Nursing Practice in the Care of the	0.5	and Co-NSG221L and Co-NSG221C NSG141 and NSG141L and NSG141C
NSUZZIL	Reproducing and Developing Family (lab)	0.5	and Co-NSG221 and Co-NSG221C
NSG221C	Concepts of Nursing Practice in the Care of the	1	NSG141 and NSG141L and NSG141C
	Reproducing and Developing Family (clinical)		and Co-NSG221 and Co-NSG221L
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141
NSG241	Concepts of Nursing Practice in the Care of	3	BIO122 and NSG141 and NSG141L and
	Adult Patients with Stable and Unstable Acute Conditions (lecture)		NSG141C and Co-NSG241L and Co-NSG241C
NSG241L	Concepts of Nursing Practice in the Care of	0.5	BIO122 and NSG141 and NSG141L and
11002111	Adult Patients with Stable and Unstable Acute Conditions	0.5	NSG141C and Co-NSG241 and
	(lab)		Co-NSG241C
NSG241C	Concepts of Nursing Practice in the Care of	<u>1.5</u>	BIO122 and NSG141 and NSG141L and
	Adult Patients with Stable and Unstable Acute Conditions		NSG141C and Co-NSG241 and
	(clinical)	13	Co-NSG241L
		13	
Fourth Semester			
NSG261	Concepts of Nursing Practice in the Care of	5	BIO221 and PSY123 and NSG221 and
	Patients Across the Lifespan with Complex Conditions		NSG221L and NSG221C and NSG241
	(lecture)		and NSG241L and NSG241C and Co-NSG261L and Co-NSG261C
			CO-INSCIONE and CO-INSCIONE
NSG261L	Concepts of Nursing Practice in the Care of	1	BIO221 and PSY123 and NSG221 and
	Patients Across the Lifespan with Complex Conditions		NSG221L and NSG221C and NSG241 and
	(lab)		NSG241L and NSG241C and Co-NSG261 and Co-NSG261C
NSG261C	Concepts of Nursing Practice in the Care of	3	BIO221 and PSY123 and NSG221 and
	Patients Across the Lifespan with Complex Conditions	_	NSG221L and NSG221C and NSG241 and
	(clinical)		NSG241L and NSG241C and Co-NSG261
			and Co-NSG261L
SOC121	Sociology	$\frac{3}{12}$	IDS101 or Proficiency
		12	
	moment comments		

# TOTAL CREDITS

64

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required. Application deadline is March 31 for Fall admission. All applications will be considered on a selective admission basis.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

<sup>^</sup>Based on SSC placement score.

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

A Because of strong emphasis on science in this major, applicants must have successfully completed 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.



# ASSOCIATE OF APPLIED SCIENCE CONCEPT-BASED RN COMPLETION FOR PARAMEDICS

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3359

Pre-3362

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Nursing Department

A Paramedic admitted to Stark State College's Concept-Based Nursing program with advanced standing admission meets the credit requirements for graduation in the following way:

- 41 credits for 3 semesters of course work (see listing below).
- 13 hours of prerequisite credits (see listing below).

PRE-NURSING 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	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency	
PSY121	General Psychology^	3	IDS102 or Proficiency	
	TOTAL CREDIT HOURS	13		

THREE SEMESTERS OF COURSEWORK AS LISTED BELOW:				
TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NSG122	Transition for the Paramedic (lecture)	2	Admission to Program and Co-NSG122L and Co-NSG122C and Co-NSG101	
NSG122L	Transition for the Paramedic (lab)	0.5	Admission to Program and Co-NSG122 and Co-NSG122C and Co-NSG101	
NSG122C	Transition for the Paramedic (clinical)	1.5	Admission to Program <b>and</b> Co-NSG122 <b>and</b> Co-NSG122L <b>and</b> Co-NSG101	
NSG101	Clinical Reasoning in Current Nursing Practice	2	(Co-NSG100 and Co-NSG100L and Co-NSG100C) or (Co-NSG122 and Co-NSG122L and Co-NSG122C) or (Co-NSG123 and Co-NSG123L and Co-NSG123C)	
NSG141	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (lecture)	1.5	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141L and Co-NSG141C	
NSG141L	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (lab)	0.5	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141 and Co-NSG141C	
NSG141C	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (clinical)	1	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and	1/2024

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# **CONCEPT-BASED RN COMPLETION FOR PARAMEDICS**

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			Co-NSG141 and Co-NSG141L	
NSG221	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (lecture)	2.5	NSG141 and NSG141L and NSG141C and Co-NSG221L and Co-NSG221C	
NSG221L	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (lab)	0.5	NSG141 and NSG141L and NSG141C and Co-NSG221 and Co-NSG221C	
NSG221C	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (clinical)	1	NSG141 and NSG141L and NSG141C and Co-NSG221 and Co-NSG221L	
NSG241	Concepts of Nursing Practice in the Care of Adult Patients with Stable and Unstable Acute Conditions (lecture)	3	BIO122 and NSG141 and NSG141L and NSG141C and Co-NSG241L and Co-NSG241C	
NSG241L	Concepts of Nursing Practice in the Care of Adult Patients with Stable and Unstable Acute Conditions (lab)	0.5	BIO122 and NSG141 and NSG141L and NSG141C and Co-NSG241 and Co-NSG241C	
NSG241C	Concepts of Nursing Practice in the Care of Adult Patients with Stable and Unstable Acute Conditions (clinical)	1.5	BIO122 and NSG141 and NSG141L and NSG141C and Co-NSG241 and Co-NSG241L	
NSG261	Concepts of Nursing Practice in the Care of Patients Across the Lifespan with Complex Conditions (lecture)	5	BIO221 and PSY123 and NSG221 and NSG221L and NSG221C and NSG241 and NSG241L and NSG241C and Co-NSG261L and Co-NSG261C	
NSG261L	Concepts of Nursing Practice in the Care of Patients Across the Lifespan with Complex Conditions (lab)	1	BIO221 and PSY123 and NSG221 and NSG221L and NSG221C and NSG241 and NSG241L and NSG241C and Co-NSG261 and Co-NSG261C	
NSG261C	Concepts of Nursing Practice in the Care of Patients Across the Lifespan with Complex Conditions (clinical)	3	BIO221 and PSY123 and NSG221 and NSG221L and NSG221C and NSG241 and NSG241L and NSG241C and Co-NSG261 and Co-NSG261L	
	Total	27		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO122	Anatomy and Physiology II (Lab)	4	BIO121 or BIO123	
BIO221	Principles of Microbiology (Lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
PSY123	Human Growth and Development	3	PSY121	
SOC121	Sociology^	3	IDS102 or proficiency	
	Total	14		
	TOTAL CREDIT HOURS	54		

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#### 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.

#### A student cannot register for NSG courses until accepted into the program.

Pre-Nursing Cou	<u>irses</u>	Credit H	ours Pre- and Co-requisites
	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency
	Anatomy and Physiology I (Lab) ▲@	4	BIO101 or Proficiency
	General Psychology ^	3	IDS102 or Proficiency
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
		13	
First Semester			
BIO122	Anatomy and Physiology II (Lab)	4	BIO121 or BIO123
E:4 C4	Eine 0 Wester		
First Semester –		2	(C. NGC100 1 C. NGC1001 1 C
NSG101	Clinical Reasoning in Current Nursing Practice	2	(Co-NSG100 and Co-NSG100L and Co-NSG100C) <b>or</b> (Co-NSG122 and Co-NSG122L
			and Co-NSG122C) or (Co-NSG123 and
			Co-NSG123L and Co-NSG123C
NSG122	Transition for the Paramedic (lecture)	2	Admission to Program and Co-NSG122L
			and Co-NSG122C and Co-NSG101
NSG122L	Transition for the Paramedic (lab)	0.5	Admission to Program and Co-NSG122
NSG122C	Transition for the Paramedic (clinical)	1.5	and Co-NSG122C and Co-NSG101 Admission to Program and Co-NSG122
NSG122C	Transition for the Paramedic (clinical)	1.3	and Co-NSG122L and Co-NSG101
First Semester –	Second 8 Weeks		and co 14501222 and co 1450101
	Concepts of Nursing Practice in the Care	1.5	(BIO121 or BIO123) and
	of Patients with Mental Illness Issues (lecture)		(NSG100 and NSG100L and NSG100C) or
			(NSG122 and NSG122L and NSG122C) or
			(NSG123 and NSG123L and NSG123C) and
NSG141L	Concepts of Nursing Practice in the Care	0.5	NSG101 and Co-NSG141C (BIO121 or BIO123) and (NSG100
	of Patients with Mental Illness Issues (lab)	0.5	and NSG100L and NSG100C) or
	of Fatients with Mental Hilless Issues (180)		(NSG122 and NSG122L and NSG122C) or
			(NSG123 and NSG123L and NSG123C) and
			NSG101 and Co-NSG141 and Co-NSG141C
	Concepts of Nursing Practice in the Care	<u>1</u>	(BIO121 or BIO123) and (NSG100 and
	of Patients with Mental Illness Issues (clinical)		NSG100L and NSG100C) or (NSG122
			and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and
			Co-NSG141 and Co-NSG141L
		13	
Second Semester	•	13	
	Human Growth and Development	3	PSY121
	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141
	Concepts of Nursing Practice in the Care of the	2.5	NSG141 and NSG141L and NSG141C
	Reproducing and Developing Family (lecture)		and Co-NSG221L and Co-NSG221C
	Concepts of Nursing Practice in the Care of the	0.5	NSG141 and NSG141L and NSG141C
	Reproducing and Developing Family (lab)		and Co-NSG221 and NSG221C
NSG221C	Concepts of Nursing Practice in the Care of the	1	NSG141 and NSG141L and NSG141C
	Reproducing and Developing Family (clinical)		and Co-NSG221 and Co-NSG221L

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#### **CONCEPT-BASED RN COMPLETION FOR PARAMEDICS**

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NSG241	Concepts of Nursing Practice in the Care of	3	BIO122 and NSG141 and NSG141L and
1.552.1	Adult Patients with Stable and Unstable Acute Conditions		NSG141C and Co-NSG241L
	(lecture)		and Co-NSG241C
NSG241L	Concepts of Nursing Practice in the Care of	0.5	BIO122 and NSG141 and NSG141L and
	Adult Patients with Stable and Unstable Acute Conditions (lab)		NSG141C and Co-NSG241 and Co-NSG241C
NSG241C	Concepts of Nursing Practice in the Care of	<u>1.5</u>	BIO122 and NSG141 and NSG141L and
	Adult Patients with Stable and Unstable Acute Conditions (clinical)		NSG141C and Co-NSG241 and Co-NSG241L
		16	
Third Semeste	<u>r</u>		
SOC 121	Sociology^	3	IDS102 or Proficiency
NSG261	Concepts of Nursing Practice in the Care of	5	BIO221 and PSY123 and NSG221 and
	Patients Across the Lifespan with Complex Conditions		NSG221L and NSG221C and NSG241 and
	(lecture)		NSG241L and NSG241C and Co-NSG261L
			and Co-NSG261C
NSG261L	Concepts of Nursing Practice in the Care of	1	BIO221 and PSY123 and NSG221 and
115G201E	Patients Across the Lifespan with Complex Conditions	1	NSG221L and NSG221C and NSG241 and
	(lab)		NSG241L and NSG241C and Co-NSG261
	()		and Co-NSG261C
NSG261C	Concepts of Nursing Practice in the Care of	<u>3</u>	BIO221 and PSY123 and NSG221 and
	Patients Across the Lifespan with Complex Conditions		NSG221L and NSG221C and NSG241 and
	(clinical)		NSG241L and NSG241C and Co-NSG261
			and Co-NSG261L
		12	
	TOTAL CREDITS	54	

<sup>^</sup>Based on SSC placement scores

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Application deadline is March 31 for Fall admission.

BIO101 is waived as a prerequisite course for Paramedics applying for advanced standing admissions.

The Stark State College ADN Program has several written articulation agreements with universities for RN to BSN Completion Programs.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

<sup>@&</sup>quot;B" or better in BIO101 or High School Biology (must be within 5 years).

A Because of strong emphasis on science in this major, applicants must have successfully completed 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.



# MAP

# ASSOCIATE OF APPLIED SCIENCE

# **CONCEPT-BASED RN COMPLETION FOR LPN**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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#### Health and Public Services Division

Nursing Department

A Licensed Practical Nurse (LPN) admitted to Stark State College's Concept-Based Nursing program with advanced standing admission meets the credit requirements for graduation in the following way:

- 41 credits for nursing courses granted upon successful completion of the Transition for the LPN course.
- 13 hours of prerequisite credit (see Admission Criteria and listing below).

PRE-NURSING CREDITS AS LISTED BELOW:						
NON-TECH Course Number	Course Title	Credits	Credits Pre- and Co-Requisites			
BIO121	Anatomy and Physiology I (lab) A	4	BIO101 or Proficiency			
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency			
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency			
PSY121	General Psychology^	3	IDS102 or Proficiency			
	TOTAL CREDIT HOURS	13				

ONE CALENDAR YEAR CURRICULUM AS LISTED BELOW:						
TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
NSG123	Transition for the LPN (lecture)	2	Admission to Program <b>and</b> Co- NSG123L <b>and</b> Co-NSG123C <b>and</b> Co- NSG101			
NSG123L	Transition for the LPN (lab)	0.5	Admission to Program and Co-NSG123 and Co-NSG123C and Co-NSG101			
NSG123C	Transition for the LPN (clinical)	1.5	Admission to Program and Co-NSG123 and Co-NSG123L and Co-NSG101			
NSG101	Clinical Reasoning in Current Nursing Practice	2	(Co-NSG100 and Co-NSG100L and Co-NSG100C) or (Co-NSG122 and Co- NSG122L and Co-NSG122C) or (Co- NSG123 and Co-NSG123L and Co-NSG123C)			
NSG141	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (lecture)	1.5	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141L and Co-NSG141C			
NSG141L	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (lab)	0.5	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141 and Co-NSG141C			
NSG141C	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (clinical)	1	(BIO121 or BIO123) and (NSG100 and NSG100L and NSG100C) or (NSG122 and NSG122L and NSG122C) or (NSG123 and NSG123L and NSG123C) and NSG101 and Co-NSG141 and Co-NSG141L			
NSG221	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (lecture)	2.5	NSG141 and NSG141C and Co-NSG221L and Co-NSG221C			
NSG221L	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (lab)	0.5	NSG141 and NSG141L and NSG141C and Co-NSG221 and Co-NSG221C			

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#### **CONCEPT-BASED RN COMPLETION FOR LPN**

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NSG221C	Concepts of Nursing Practice in the Care of the	1	NSG141 and NSG141L and NSG141C	
NSG221C	Reproducing and Developing Family (clinical)	1	and Co-NSG221 and Co-NSG221L	
	Concepts of Nursing Practice in the Care of Adult		BIO122 and NSG141 and NSG141L	
NSG241	Patients with Stable and Unstable Acute Conditions	3	and NSG141C and Co-NSG241L and	
	(lecture)		Co-NSG241C	
	Concepts of Nursing Practice in the Care of Adult		BIO122 and NSG141 and NSG141L	
NSG241L	Patients with Stable and Unstable Acute Conditions	0.5	and NSG141C and Co-NSG241 and	
	(lab)		Co-NSG241C	
	Concepts of Nursing Practice in the Care of Adult		BIO122 and NSG141 and NSG141L	
NSG241C	Patients with Stable and Unstable Acute Conditions	1.5	and NSG141C and Co-NSG241 and	
	(clinical)		Co-NSG241L	
	Concepts of Nursing Practice in the Care of		BIO221 and PSY123 and NSG221 and	
NSG261	Patients Across the Lifespan with Complex	5	NSG221L and NSG221C and NSG241	
1150201	Conditions (lecture)		and NSG241L and NSG241C and Co-	
	Conditions (rectare)		NSG261L and Co-NSG261C	
	Concepts of Nursing Practice in the Care of		BIO221 and PSY123 and NSG221 and	
NSG261L	Patients Across the Lifespan with Complex Conditions (lab)  Concepts of Nursing Practice in the Care of Patients Across the Lifespan with Complex Conditions (clinical)	1	NSG221L and NSG221C and NSG241	
1,502012		1	and NSG241L and NSG241C and Co-	
			NSG261 and Co-NSG261C	
			BIO221 and PSY123 and NSG221 and	
NSG261C		3	NSG221L and NSG221C and NSG241	
			and NSG241L and NSG241C and Co-	
	, ,		NSG261 and Co-NSG261L	
	Total	27		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DIO221	Principles of Microbiology (lab)		BIO122 or BIO123 or BIO127	
BIO221		4	or BIO141	
BIO122	Anatomy and Physiology II (Lab)	4	BIO121 or BIO123	
PSY123	Human Growth and Development	3	3 PSY121	
SOC121	Sociology^	3	IDS102 or proficiency	
	Total	14		
	TOTAL CREDIT HOURS	54		

<sup>^</sup>Based on SSC placement scores

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Application deadline is March 31 for Fall admission and October 31 for Spring admission.

BIO101 is waived as a prerequisite course for LPNs applying for advanced standing admissions.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

A Because of strong emphasis on science in this major, applicants must have successfully completed 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.

#### Effective Summer 2024

#### 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.

#### A student cannot register for NSG courses until accepted into the program.

Pre-Nursing Co	<u>burses</u>	Credit Hou	rs Pre- and Co-requisites
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency
BIO121	Anatomy and Physiology I (Lab) ▲	4	BIO101 or Proficiency
PSY121	General Psychology ^	3	IDS102 or Proficiency
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
		13	•
First Semester			
BIO122	Anatomy and Physiology II (Lab)	4	BIO121 or BIO123
First Semester -	- First 8 Weeks		
NSG101	Clinical Reasoning in Current Nursing Practice	2	(Co-NSG100 and Co-NSG100L and Co-
			NSG100C) or (Co-NSG122 and Co-NSG122L
			and Co-NSG122C) or (Co-NSG123 and
NSG123	Transition for the LPN (lecture)	2	Co-NSG123L and Co-NSG123C) Admission to Program and Co-NSG123L
NSG125	Transition for the Li iv (lecture)	2	and Co-NSG123C and Co-NSG101
NSG123L	Transition for the LPN (lab)	0.5	Admission to Program and Co-NSG123
	, ,		and Co-NSG123C and Co-NSG101
NSG123C	Transition for the LPN (clinical)	1.5	Admission to Program and Co-NSG123
			and Co-NSG123L and Co-NSG101
First Semester -	- Second 8 Weeks		
NSG141	Concepts of Nursing Practice in the Care	1.5	(BIO121 or BIO123) and
	of Patients with Mental Illness Issues (lecture)		(NSG100 and NSG100L and NSG100C) or
			(NSG122 and NSG122L and NSG122C) or
			(NSG123 and NSG123L and NSG123C) and
NGC1411	Communication in the Comm	0.5	NSG101 and Co-NSG141L and Co-NSG141C
NSG141L	Concepts of Nursing Practice in the Care of Patients with Mental Illness Issues (lab)	0.5	(BIO121 or BIO123) and (NSG100
	of Patients with Mental Timess Issues (lab)		and NSG100L and NSG100C) <b>or</b> (NSG122 and NSG122L and NSG122C) <b>or</b>
			(NSG123 and NSG123L and NSG123C) and
			NSG101 and Co-NSG141 and Co-NSG141C
NSG141C	Concepts of Nursing Practice in the Care	<u>1</u>	(BIO121 or BIO123) and (NSG100 and
	of Patients with Mental Illness Issues (clinical)	_	NSG100L and NSG100C) or (NSG122 and
			NSG122L and NSG122C) or (NSG123 and
		N	SG123L and NSG123C) and NSG101 and
		13	Co-NSG141 and Co-NSG141L
		13	

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#### **CONCEPT-BASED RN COMPLETION FOR LPN**

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	ond Semest			
NSC	G221	Concepts of Nursing Practice in the Care of the Reproducing and Developing Family (lecture)	2.5	NSG141 and NSG141L and NSG141C and Co-NSG221L and Co-NSG221C
NSC	G221L	Concepts of Nursing Practice in the Care of the	0.5	NSG141 and NSG141L and NSG141C
		Reproducing and Developing Family (lab)		and Co-NSG221 and NSG221C
NSC	G221C	Concepts of Nursing Practice in the Care of the	1	NSG141 and NSG141L and NSG141C
		Reproducing and Developing Family (clinical)		and Co-NSG221 and Co-NSG221L
PSY	7123	Human Growth and Development	3	PSY121
BIO	221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141
NSC	G241	Concepts of Nursing Practice in the Care of	3	BIO122 and NSG141 and NSG141L and
		Adult Patients with Stable and Unstable Acute Conditions (lecture)		NSG141C and Co-NSG241L and Co-NSG241C
NSC	G241L	Concepts of Nursing Practice in the Care of	0.5	BIO122 and NSG141 and NSG141L and
		Adult Patients with Stable and Unstable Acute Conditions (lab)		NSG141C and Co-NSG241 and Co-NSG241C
NSC	G241C	Concepts of Nursing Practice in the Care of	<u>1.5</u>	BIO122 and NSG141 and NSG141L and
		Adult Patients with Stable and Unstable Acute Conditions (clinical)		NSG141C and Co-NSG241 and Co-NSG241L
			16	
Thir	d Semester			
	C 121	Sociology^	3	IDS102 or Proficiency
NSC	G261	Concepts of Nursing Practice in the Care of	5	BIO221 and PSY123 and NSG221 and
		Patients Across the Lifespan with Complex Conditions		NSG221L and NSG221C and NSG241 and
		(lecture)		NSG241L and NSG241C and Co-NSG261L and Co-NSG261C
NSC	G261L	Concepts of Nursing Practice in the Care of	1	BIO221 and PSY123 and NSG221 and
		Patients Across the Lifespan with Complex Conditions		NSG221L and NSG221C and NSG241 and
		(lab)		NSG241L and NSG241C and Co-NSG261 and Co-NSG261C
NS	G261C	Concepts of Nursing Practice in the Care of	<u>3</u>	BIO221 and PSY123 and NSG221 and
		Patients Across the Lifespan with Complex Conditions		NSG221L and NSG221C and NSG241 and
		(clinical)		NSG241L and NSG241C and Co-NSG261
			12	and Co-NSG261L
		TOTAL CREDITS	54	

<sup>^</sup>Based on SSC placement scores

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

Application deadline is March 31 for Fall admission and October 31 for Spring admission.

BIO101 is waived as a prerequisite course for LPNs applying for advanced standing admissions.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

ABecause of strong emphasis on science in this major, applicants must have successfully completed 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.



# MAP

Health and Public Services Division

## ASSOCIATE OF APPLIED SCIENCE

# **SURGICAL TECHNOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing.

Refer to Policy No. 3357:15-13-28.

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Respiratory, Laboratory, and Surgical Technology Dept.

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SUR102	Principles of Surgery I▲ -	3	Co-SUR102L	
SUR102L	Principles of Surgery I Lab ▲ -	1	Co-SUR102	
SUR104	Surgical Pharmacology ▲ -	3	Pre-Co-(BIO122 or BIO123)	
SUR105	Surgical Anatomy and Pathology ▲ +	3	SUR102 and (BIO121 or BIO123)	
SUR106	Principles of Surgery II ▲ +	3	SUR102 and Co-SUR106L	
SUR106L	Principles of Surgery II Lab ▲ +	1	SUR102L and Co-SUR106	
SUR200	Surgical Specialties I *	2	SUR106 and Co-SUR200L	
SUR200L	Surgical Specialties I Lab ▲ *	1	SUR106L and Co-SUR200	
SUR201C	Surgical Clinical Practicum I A -	3	SUR200 and SUR200L and Co-SUR201	
SUR201	Surgical Clinical Practicum I Seminar ▲ -	1	Co-SUR201C	
SUR202	Surgical Specialties II ▲ -	2	SUR200 and Co-SUR202L	
SUR202L	Surgical Specialties II Lab ▲ -	1	SUR200L and Co-SUR202	
SUR203C	Surgical Clinical Practicum II ▲ +	4	SUR201C and Co-SUR203 and Co-SUR204	
SUR203	Surgical Clinical Practicum II Seminar ▲ +	1	Co-SUR203C	
SUR204	Surgical Technology Capstone ▲ +	2	Co-SUR203C	
	Total	31		
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	Co-ENG024 or Co-ENG011 or Proficiency	
PHL122	Ethics	3		
BIO123	Principles of Human Structure and Function(lab) 🕹 # @	5	BIO101 or Proficiency	
BIO125	Medical Terminology	3		
BIO124	Human Diseases	3	BIO122 or BIO123	
BIO221	Principles of Microbiology(lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
MTH124	Statistics <sup>^</sup> Ω	3		
or MTH125	or College Algebra^ Ω	or 4	Check for prerequisites	
or	or	or	2	
MTH105 PSY121	Math for Allied Health^ General Psychology^	3	IDC102 on Profesion or	
PSY121	, .,	_	IDS102 or Proficiency	
	Sociology Elective^*	3	Check for prerequisites	
	Total	31-32		
	TOTAL CREDIT HOURS	62-63		

Effective Summer 2024

# **SURGICAL TECHNOLOGY**

3373

#### **FULL-TIME STUDENT ADVISING NOTES**

#### Academic Advising

Each student should make an appointment to see their advisor every semester before registering for classes. Please have your registration form completed, including the courses you wish to take, for this meeting.

#### Course Sequence

The semester-by-semester listing below gives the normal scheduling option for full-time associate degree students who plan to finish in two years. Some courses can be scheduled as beginning courses in other semesters depending upon course availability and advisor's recommendation. Surgical Technology courses must be taken in the order listed below.

First Semester	Student Success Servine MA	Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BIO123	Principles of Human Structure and Function (lab) \(^{\pm} #@)	5	BIO101 or Proficiency
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011
CLID 100	D.::1£ C I A	2	or Proficiency
SUR102	Principles of Surgery I A -	3	Co-SUR102L
SUR102L	Principles of Surgery I Lab ▲ -	1	Co-SUR102
SUR104	Surgical Pharmacology▲ -	<u>3</u>	Pre-Co-(BIO122 or BIO123)
		16	
Second Semester			
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141
MTH124	Statistics $^{\wedge}\Omega$	3	
or	or	or	
MTH125	College Algebra $^{\wedge}$ $\Omega$	4	Check for Pre-requisites
0r	or Math for Allied Health^	or	
MTH105		3	SUD 102 and (DIO121 on DIO122)
SUR105	Surgical Anatomy and Pathology ▲ +	3	SUR102 and (BIO121 or BIO123)
SUR106	Principles of Surgery II ▲ +	3	SUR102 and Co-SUR106L
SUR106L	Principles of Surgery II Lab ▲ +	1	SUR102L and Co-SUR106
_		14-15	
<u>Summer</u>		_	
BIO125	Medical Terminology	3	
SUR200	Surgical Specialties I▲ *	2	SUR106 and Co-SUR200L
SUR200L	Surgical Specialties I Lab ▲ *	<u>1</u>	SUR106L and Co-SUR200
		6	
Third Semester			
BIO124	Human Diseases	3	BIO122 or BIO123
PSY121	General Psychology^	3	IDS102 or Proficiency
SUR201C	Surgical Clinical Practicum I ▲ -	3	SUR200 and SUR200L and Co-SUR201
SUR201	Surgical Clinical Practicum I Seminar ▲ -	1	Co-SUR201C
SUR202	Surgical Specialties II ▲ -	2	SUR200 and Co-SUR202L
SUR202L	Surgical Specialties II Lab ▲ -	<u>1</u>	SUR200L and Co-SUR202
		13	
Fourth Semester			
Sociology Elective^*		3	Check for prerequisites
PHL122	Ethics	3	entenger protequation
SUR203C	Surgical Clinical Practicum II ▲ +	4	SUR201C and Co-SUR203 and
	Swigious Chinious Fluoricum II =	•	Co-SUR204
SUR203	Surgical Clinical Practicum II Seminar ▲ +	1	SUR203C
SUR204	Surgical Technology Capstone ▲ +	<u>2</u>	Co-SUR203C
SURZUT	bargical reciniology capsions	13	C0-501\205C
	TOTAL CREDITS	62-63	
Based on SSC placement score.	TOTAL CREDITS	02-03	

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.

<sup>^</sup>Based on SSC placement score.
^^ To promote student success, this course should be taken in the first semester.

Lecause of the strong emphasis on science in this major, applicants must have successfully completed 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.

<sup>@&</sup>quot;B" or better in BIO101 or High School Biology (must be within 5 years). # BIO121 and BIO122 can be substituted for BIO123.

<sup>+</sup> Requires a grade of "B"

<sup>\*</sup>May select from Sociology offerings only  $\Omega$  MTH125 College Algebra or MTH124 Statistics should only be taken by students planning to transfer to a four-year institution.

<sup>▲ +</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲ -</sup> Fall only courses. Please see your academic advisor for availability.

▲ \* Summer only courses. Please see your academic advisor for availability.



# ASSOCIATE OF APPLIED SCIENCE

# **DENTAL HYGIENE**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Pre-3401

#### Health and Public Services Division

#### Allied Dental Health Professions Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DHY121	Head, Neck and Oral Anatomy ▲-	2	Co-DHY123	
DHY122	Oral Histology and Embryology ▲*	1		
DHY123	Dental Radiography ▲-	3	Co-DHY121	
DHY124	Periodontics I▲+	2	DHY122	
DHY125	Dental Materials ▲+	3	DHY131	
DHY126	Pathology ▲+	2	DHY122	
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 ▲-	1	DHY134	
DHY224	Periodontics II▲+	1	DHY124	
DHY225	Anesthesia and 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	41		
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	
BIO221	Principles of Microbiology (lab)#	4	BIO122 or BIO123 or BIO127 or BIO141	
CHM123	General, Organic, and Biological Chemistry	4	(MTH024 or MTH025 or proficiency) or MTH105 or MTH107 or (CHM101 or proficiency)	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency	
PSY121	General Psychology^	3	IDS102 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
	Total CREDIT HOURS	32		
	TOTAL CREDIT HOURS	73		

<sup>^</sup>Based on SSC placement scores

Minimum grade of "C" in all technical courses is required. This program requires an application (separate from the College). Please see your advisor to discuss the application process.

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

<sup>#</sup>May not be taken earlier than 3 years prior to enrollment in DHY121.

A 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.

<sup>▲+</sup> Spring only courses. Please see your academic advisor for availability.

<sup>▲-</sup> Fall only courses. Please see your academic advisor for availability.

 $<sup>\</sup>blacktriangle\,{}^*$  Summer only courses. Please see your academic advisor for availability.

#### **DENTAL HYGIENE**

#### 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.

Pre-Eligibility Courses		<u>Credit Hours</u>	<u>Pre- and Co-Requisites</u>
CHM123	Gen., Org., and Bio., Chemistry(lab) ^	4	(MTH024 or MTH025 or proficiency) or MTH105 or MTH107 or (CHM101 or proficiency)
BIO121	Anatomy and Physiology I (lab) ▲	4	BIO101 or Proficiency
PSY121	General Psychology^	3	IDS102 or Proficiency
ENG124	College Composition^	<u>3</u>	Co-ENG024 or Co-ENG011 or Proficiency
Summer Semester 1		14	,
DHY122	Oral Histology and Embryology <b>▲</b> *	1	
MTH124	Statistics^		MTH022 or Pre-Co-MTH024 or Proficiency
W1111124	Statistics	3 <b>4</b>	WITHOUZE OF FIE-CO-WITHOUZ4 OF FIOREIGNCY
First Semester		4	
DHY121	Head, Neck and Oral Anatomy ▲-	2	Co-DHY123
DHY123	Dental Radiography ▲ -	3	Co-DHY121
DHY131	Fundamentals of Dental Hygiene Practice ▲ -	4	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123
SSC101	Student Success Seminar^^	<u>1</u>	Take first semester
Second Semester		14	·
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)#	<u>4</u>	BIO122 or BIO123 or BIO127 or BIO141
Summer Semester 2		15	
DHY134	Clinical Dental Hygiene IA ▲*	1	DHY133
DHY221	Nutrition in Dentistry <b>▲</b> *	<u>1</u>	DHY132
	·	2	
Third Semester			
SOC121	Sociology^	3	IDS102 or Proficiency
DHY222	Dental Pharmacology ▲ -	2	BIO221 and DHY126
DHY223	Community Oral Health ▲ -	1	DHY134
DHY225	Anesthesia and Pain Control ▲-	2	BIO122 and DHY121 and DHY132
DHY231	Dental Hygiene Theory II ▲ -	1	DHY132 and Co-DHY232
DHY232	Clinical Dental Hygiene II▲-	<u>4</u>	DHY134 and Co-DHY231
Fourth Semester		13	
COM121	Effective Speaking	3	
DHY224	Periodontics II ▲+	1	DHY124
DHY233	Dental Hygiene Theory III ▲+	2	DHY231 and Co-DHY234
DHY234	Clinical Dental Hygiene III ▲+	<u>5</u>	DHY232 and Co-DHY233
		11	
	TOTAL CREDITS	73	

See page one for footnotes



## ASSOCIATE OF SCIENCE

**DENTAL ASSISTING** 

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing.

Refer to Policy No. 3357:15-13-28.

2024-25 Catalog

3425

Pre-3426



#### Health and Public Services Division

#### Allied Dental Health Professions Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPE	RIENCE			
SSC101	Student Success Seminar^^	1	Take First Semester	
COMPUTER APPL	ICATIONS AND BUSINESS			
BUS121	Business Administration^	3	IDS102 or Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENGLISH COMPOS	SITION AND ORAL COMMUNICATION: 3	credit hour	s minimum	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency	
ENG230	Business Communication	3	ENG124	
SOCIAL AND BEHA	AVIORAL SCIENCES: 6 credit hours minimi	ım from two	different disciplines	
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY124	Industrial/Organizational Psychology	3		
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC225	Diversity in American Society	3	IDS102 or Proficiency	
ARTS AND HUMAN	NITIES			
PHL122	Ethics	3		
NATURAL SCIENC	ES: 6 credit hours minimum (one lab course re	quired)		
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	
MATHEMATICS, S	TATISTICS AND LOGIC: 3 credit hours min	iimum		
MTH125	College Algebra^	4		
or	or	or	Check for prerequisites	
MTH124	Statistics^	3		
	Total	45-46		
	TRATION COURSES: All required.			
DAS121	Dental Assisting Techniques I**	3		
DAS122	Dental Assisting Radiography	3		
DAS123	Dental Assisting Techniques II	3		
DAS124	Dental Assisting Materials	2		
DAS125	Dental Assisting Specialty#	3		
	Introduction to Dental Terminology and			
DAS128	Basic Anatomy	2		
	Total	16		
	TOTAL CREDIT HOURS	61-62		

<sup>^</sup>Based upon SSC placement score

#### Minimum grade of "C" in all concentration courses is required.

This program requires an application (separate from the College).

Please see your advisor to discuss the application process.

The semester-by-semester listing below gives the normal scheduling option for full-time associate degree students who plan to finish in two years. Some courses can be scheduled as beginning courses in other semesters depending upon course availability.

Students completing this degree may be eligible to also receive a Dental Assisting Career-Enhancement Certificate (3403).

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> 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.

<sup>\*\*</sup>Course may be taken in conjunction with other technical courses, but must be taken in the first semester of technical course work.

#### FULL-TIME STUDENT ADVISING NOTES

#### **Academic Advising**

Each student should make an appointment to see their advisor every semester before registering for classes. Please have your registration form completed, including the courses you wish to take, for this meeting.

#### Course Sequence

The semester-by-semester listing below gives the normal scheduling option for full-time associate degree students who plan to finish in two years. Some courses can be scheduled as beginning courses in <u>other</u> semesters depending upon course availability and advisor's recommendation.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
DAS121	Dental Assisting Techniques I**	3	,
DAS124	Dental Assisting Materials	2	
DAS128	Introduction to Dental Terminology and Basic	2	
	Anatomy		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MTH125	College Algebra^	4	·
or	or	or	Check for prerequisites
MTH124	Statistics^	<u>3</u>	
		14-15	
Second Semester			
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 or Proficiency
DAS122	Dental Assisting Radiography	3	•
DAS123	Dental Assisting Techniques II	3	DAS121
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
SOC121	Sociology^	<u>3</u>	IDS102 or Proficiency
		15	
Third Semester			
DAS125	Dental Assisting Specialty#	3	DAS123
PSY121	General Psychology <sup>^</sup>	$\frac{3}{6}$	IDS102 or Proficiency
		6	
Fourth Semester			
BIO121	Anatomy and Physiology I (lab) ▲	4	BIO101 or Proficiency
COM121	Effective Speaking	3	
PSY124	Industrial/Organizational Psychology	3	
SOC225	Diversity in American Society	3 13	IDS102 or Proficiency
		13	
Fifth Semester			
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123
BUS121	Business Administration^	3	IDS102 or Proficiency
ENG230	Business Communication	3	ENG124
PHL122	Ethics	3 13	
		13	
	TOTAL CREDITS	61-62	

See page one for footnotes



## MAP

#### ASSOCIATE OF SCIENCE

#### **EXPANDED FUNCTIONS DENTAL AUXILIARY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357.09(K):15-13-06.

2024-25 Catalog
Effective Summer 2024

3427

Pre-3428

#### Health and Public Services Division

Allied Dental Health Professions Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN I	EXPERIENCE			
SSC101	Student Success Seminar^^	1	Take First Semester	
COMPUTER A	APPLICATIONS AND BUSINESS			
BUS121	Business Administration^	3	IDS102 or Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENGLISH CO	MPOSITION AND ORAL COMMUNICATION	N: 3 credi	t hours minimum	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 <b>or</b> ENG011 <b>or</b> Proficiency	
ENG230	Business Communication	3	ENG124	
SOCIAL AND	BEHAVIORAL SCIENCES: 6 credit hours min	imum from	two different disciplines	
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY124	Industrial/Organizational Psychology	3		
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC225	Diversity in American Society	3	IDS102 or Proficiency	
ARTS AND HU	UMANITIES			
PHL122	Ethics	3		
NATURAL SC	TENCES: 6 credit hours minimum (one lab course i	reauired)		
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 or Proficiency	
BIO121	Anatomy and Physiology I (lab) A	4	BIO101 or Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123	
MATHEMATI	ICS, STATISTICS AND LOGIC: 3 credit hours	minimum		
MTH125	College Algebra^	4		
or MTH124	or Statistics^	or 3	Check for prerequisites	
WHITE	TOTAL GENERAL EDUCATION CREDITS	45-46		
AREA OF CO	NCENTRATION COURSES: All required.	<u> </u>		
DAS125	Dental Assisting Specialty#	3		
DAS225	Dental Morphology for Expanded Functions Dental Auxiliary	2	Co-DAS226 and Co-DAS227	
DAS226	Expanded Dental Assisting I	2	Co-DAS225 <b>and</b> Co-DAS227	
DAS227	Expanded Dental Assisting II	4	Co-DAS225 and Co-DAS226	
DAS228	Directed Clinical Practice	5	DAS225 and DAS226 and DAS227	
	TOTAL TECHNICAL CREDITS	16		
	TOTAL CREDIT HOURS	61-62		

See last page for footnotes

#### **EXPANDED FUNCTIONS DENTAL AUXILIARY**

3427

#### FULL-TIME STUDENT ADVISING NOTES

#### Academic Advising

Each student should make an appointment to see their advisor every semester before registering for classes. Please have your registration form completed, including the courses you wish to take, for this meeting.

#### Course Sequence

The semester-by-semester listing below gives the normal scheduling option for full-time associate degree students who plan to finish in two years. Some courses can be scheduled as beginning courses in <u>other</u> semesters depending upon course availability and advisor's recommendation.

First Semester		Credit Hours	Pre- and Co-requisites
DAS225	Dental Morphology for Expanded Functions		
	Dental Auxiliary	2	Co-DAS226 and Co-DAS227
DAS226	Expanded Dental Assisting I	2	Co-DAS225 and Co-DAS227
DAS227	Expanded Dental Assisting II	4	Co-DAS225 and Co-DAS226
DAS125	Dental Assisting Specialty#	3	
SSC101	Student Success Seminar^^	$\frac{1}{12}$	Take first semester
		12	
Second Semester			
BIO101	Introduction to Anatomy and Physiology <sup>^</sup>	3	IDS102 or Proficiency
DAS228	Directed Clinical Practice	5	DAS225 and DAS226 and DAS227
MTH125	College Algebra^	4	
or	or	or	Check for prerequisites
MTH124	Statistics^	<u>3</u>	
		11-12	
Summer Semester			
ENG124	College Composition <sup>^</sup>		Co-ENG024 or ENG011 or Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
SOC121	Sociology^	3 <u>3</u> 12	IDS102 or Proficiency
		12	
Fourth Semester			
BIO121	Anatomy and Physiology I (lab) ▲	4	BIO101 or Proficiency
COM121	Effective Speaking	3	
PSY124	Industrial/Organizational Psychology	3 <u>3</u> <b>13</b>	
SOC225	Diversity in American Society	<u>3</u>	IDS102 or Proficiency
		13	
Fifth Semester			
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123
BUS121	Business Administration^	3	IDS102 or Proficiency
ENG230	Business Communication	3	ENG124
PHL122	Ethics	<u>3</u>	
		13	
	TOTAL CREDITS	61-62	

<sup>^</sup>Based upon SSC placement score

#### Minimum grade of "C" in all concentration courses is required.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲</sup> 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.

<sup>#</sup>Because DAS125 provides the clinical practice experience needed to meet the clinical experience requirement for the EFDA program, applicants must select the "Clinical Practice" option ("Option A") for this course. *Please see the College Catalog for additional information regarding this course.* 



## MAP

### ASSOCIATE OF APPLIED SCIENCE

#### AAS MASSAGE THERAPY - FALL START

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

3453 Pre-3454

Therapy & Wellness Programs Department

Health and Public Services Division

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MAS121	Massage Therapy I	5		
MAS122	Massage Therapy II	2	MAS121 and MAS123	
MAS123	Massage Therapy Anatomy and Physiology I	3		
MAS124	Massage Therapy Anatomy and Physiology II☆	3	MAS123 and Pre-Co-BIO122 or BIO123	
MAS223	Massage Therapy Review	3	(BIO122 or BIO123) and Pre-Co-MAS226	
MAS224	Massage Therapy III	2	MAS121	
MAS225	Massage Therapy IV	2	MAS121	
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	
	TOTAL	30		
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#	5	BIO101 or Proficiency	
BIO125	Medical Terminology	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
GER121	Introduction to Gerontology	3		
MTH105	Math for Allied Health ^	3		
or MTH124	or Statistics^ Ω	or 3	Check for prerequisites	
0r	or	or	Check for prerequisites	
MTH125	College Algebra Ω	4		
NTR121	Nutrition for Health^	3	IDS102 or Proficiency	
PHL122	Ethics	3		
PSY222	Psychological Aspects of Therapy^	3	IDS102 or Proficiency	
EXS110	Anatomy of Exercise	3	Co-BIO122 or Co-BIO123 and Co-EXS110L	
EXS110L	Anatomy of Exercise Lab	1	Co-EXS110	
	TOTAL	31-32		
	TOTAL CREDIT HOURS	61-62		

<sup>^</sup>Based on SSC placement scores

<sup>^</sup>To promote student success, this course must be taken in the first semester.

<sup>#</sup>BIO121 and BIO122 can be substituted for BIO123.

**<sup>★</sup>**Indicates only offered as Web 3.

A 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.

<sup>@</sup>Application criteria requires a "C" or better in BIO101 or HS BIO to apply to the Massage program.

Effective Summer 2024

#### 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.

on in two years.			
Fall Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BIO123	Principles of Human Structure and Function#	5	BIO101 or Proficiency
MAS121	Massage Therapy I	5	
MAS123	Massage Therapy Anatomy and Physiology I	<u>3</u>	
		14	
Spring Semester			
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011
21,012.	conege composition	· ·	or Proficiency
MAS122	Massage Therapy II	2	MAS121 and MAS123
MAS124	Massage Therapy II  Massage Therapy Anatomy and Physiology II☆	3	MAS123 and
MAS124	Wassage Therapy Anatomy and Thysiology 11	3	Pre-Co-BIO122 or BIO123
MAS224	Massaga Thanany III	2	MAS121
	Massage Therapy III  Math for Allied Health ^	2	MAS121
MTH105		3	
or	or	or	
MTH124	Statistics <sup>^</sup> Ω	3	Check for prerequisites
or	or	or	
MTH125	College Algebra $\Omega$	<u>4</u>	
		13-14	
Summer Semester			
BIO125	Medical Terminology	3	
MAS225	Massage Therapy IV	2	MAS121
MAS228	Professional Practice and Evaluation	1	MAS122
PSY222	Psychological Aspects of Therapy^	<u>3</u>	IDS102 or Proficiency
		9	
Fall Semester			
MAS223	Massage Therapy Review	3	(BIO122 or BIO123)
			and Pre-Co-MAS226
MAS226	Massage Therapy V	3	MAS124 and MAS225
MAS227	Massage Therapy Procedures	2	MAS121
MAS229	Clinic Operations	2	MAS225
MAS231	Sports Massage	<u>2</u>	MAS121
1411 1525 1	Sports Mussage	12	1417 15121
Spring Semester		12	
EXS110	Anatomy of Exercise	3	Co-BIO122 or Co-BIO123 and
EASITO	Aliatomy of Exercise	3	Co-EXS110L
EVOIDII	A	1	
EXS101L	Anatomy of Exercise Lab	1	Co-EXS110
GER121	Introduction to Gerontology	3	
NTR121	Nutrition for Health^	3	IDS102 or Proficiency
PHL122	Ethics	$\frac{3}{13}$	
	TOTAL CREDITS	61-62	

See page one for footnotes



## MAP

# Associate of Science DIETETIC TECHNICAN

**2024-25 Catalog** 

Effective Summer 2024

3560

Pre-3561

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing.

Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Therapy & Wellness Programs Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year			
FRESHMAN	FRESHMAN EXPERIENCE						
SSC101	Student Success Seminar^^	1	Take first semester				
ENGLISH CO	OMPOSITION AND ORAL COMMUNICA	ATION:					
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency				
COM121	Effective Speaking	3					
SOCIAL AND	BEHAVIORAL SCIENCES: 6 credit hour.	s from two	different disciplines				
	Social & Behavioral Sciences Elective <sup>1</sup>	6	Check for prerequisites				
ARTS AND H	UMANITIES: 6 credit hours from two differen	t discipline	S				
	Arts & Humanities Elective <sup>2</sup>	3	Check for prerequisites				
PHL122	Ethics (required)	3					
NATURAL SO	CIENCES: 15 credit hours						
BIO127	Human Biology # (lab)	4					
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141				
CHM123 or CHM100	General, Organic, and Biological Chemistry  or  Exploring Science and Technology	4 <b>or</b> 4	Check for prerequisites				
NTR121	Nutrition for Health	3	IDS102 or proficiency				
MATHEMAT	ICS, STATISTICS AND LOGIC: 3 credit h	iours					
MTH105 <b>or</b> MTH124	Math for Allied Health $^{\wedge}$ or Statistics $^{\wedge}\Omega$	3 <b>or</b> 3	Check for prerequisites				
	TOTAL	37					

<sup>^</sup>Based on SSC placement scores.

This program requires an application (separate from the College). Please see your advisor to discuss the application process.

Students completing this degree may be eligible to also receive a Dietary Manager One-Year Certificate (3564) and a Dietary Manager Career-Enhancement Certificate (3566).

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

<sup>#</sup>BIO121 and BIO122 can be substituted for BIO127

 $<sup>\</sup>Omega$  MTH124 should be taken by students planning to transfer to a four-year institution.

Social and Behavioral Sciences Electives: PSY121, SOC121, PSC121, PSY123, PSY124, PSY220, PSY221, PSY131, SOC122, SOC123, SOC225, BUS122, BUS221, BUS222. At least 3 credits must be a PSY or SOC elective.

<sup>&</sup>lt;sup>2</sup>Arts and Humanities: ENG233, ENG234, ENG235, ENG236, ENG237, ENG239, ENG240, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122.

<b>2024-25 Catalog</b>
Effective Summer 2024

### **AS - DIETETIC TECHNICAN**

3560

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year			
Concentration	Concentration Core: All are required						
DMA135	Food Operations Directed Practice	1	Co-NTR130 or Permission				
DMA145	Nutrition Management Directed Practice	1	NTR121 and Pre-Co- NTR122 or Permission				
DMA155	Dietary Systems Directed Practice	1	Co-DTR228 or Permission				
DTR122	Life Cycle Nutrition	3	NTR121				
DTR223	Medical Nutrition and Professionalism Directed Practice	2	Permission				
DTR225	Community Nutrition	3	NTR121				
DTR226	Community Nutrition Directed Practice	2	Permission				
DTR228	Dietary Systems	3					
DTR229	Professional Dietetics	1	Permission				
DTR235	Medical Nutrition Therapy I	3	NTR122				
DTR236	Medical Nutrition Therapy II	3	DTR235				
NTR122	Introduction to Medical Nutrition Therapy	1	NTR121				
NTR130	Food Operations	3					
NTR130L	Food Operations Lab	1	Co-NTR130				
	TOTAL	28					
	TOTAL CREDIT HOURS	65					

See page one for footnotes

**2024-25 Catalog** 

Effective Summer 2024

### **AS - DIETETIC TECHNICAN - Proposed**

3560

#### 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 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 <a href="http://www.transfer.org/uselect">http://www.transfer.org/uselect</a> 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
DMA135	Food Operations Directed Practice	1	Co-NTR130 or Permission
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011
			or proficiency
MTH124	Statistics <sup>^</sup> Ω	3	• •
or	or	or	Check for prerequisites
MTH105	Math for Allied Health <sup>^</sup>	3	
NTR121	Nutrition for Health	3	IDS102 or Proficiency
NTR130	Food Operations	3	
NTR130L	Food Operations Lab	<u>1</u>	Co-NTR130
		15	
Second Semeste	<u>r</u>		
BIO127	Human Biology # (lab)	4	
NTR122	Introduction to Medical Nutrition Therapy	1	NTR121
DMA145	Nutrition Management Directed Practice	1	NTR121 and Pre-Co-NTR122 or Permission
DMA155	Dietary Systems Directed Practice	1	Co-DTR228 or Permission
DTR122	Life Cycle Nutrition	3	NTR121
DTR228	Dietary Systems	3	
Social & Behavi	oral Sciences Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		16	
Summer Semest	<u>er</u>		
COM121	Effective Speaking	3	
Social & Behavi	oral Sciences Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		6	
Third Semester			
Arts & Humanit		3	Check for prerequisites
CHM123	General, Organic, and Biological Chemistry	4	Check for prerequisites
or	or	or	
CHM100	Exploring Science and Technology	4	
DTR225	Community Nutrition	3	NTR121
DTR226	Community Nutrition Directed Practice	2	Permission
DTR235	Medical Nutrition Therapy I	<u>3</u>	NTR122
		15	
Fourth Semester			
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141
PHL122	Ethics (required)	3	
DTR223	Medical Nutrition and Professionalism Directed	2	Permission
	Practice		
DTR229	Professional Dietetics	1	Permission
DTR236	Medical Nutrition Therapy II	<u>3</u>	DTR235
		13	
	TOTAL CREDITS	65	

See page one for footnotes



#### **ONE-YEAR CERTIFICATE**

#### **DIETARY MANAGER**

**2024-25 Catalog** 

Effective Summer 2024

3564 Pre-3565

changes only when students change their major or request the change in writing.

Refer to Policy No. 3357:15-13-28.

The catalog in force is assigned to students based on the academic year they first applied to the college, and

Health and Public Services Division

Therapy & Wellness Programs Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
NTR130	Food Operations	3				
NTR122	Introduction to Medical Nutrition Therapy	1	NTR121			
DTR122	Life Cycle Nutrition	3	NTR121			
DTR228	Dietary Systems	3				
DMA135	Food Operations Directed Practice	1	Co-NTR130 or Permission			
DMA145	Nutrition Management Directed Practice	1	NTR121 and Pre-Co-NTR122 or Permission			
DMA155	Dietary Systems Directed Practice	1	Co-DTR228 or Permission			
	TOTAL	13				
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
SSC101	Student Success Seminar^^	1	Take first semester			
BIO127	Human Biology # (lab)	4				
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency			
COM121	Effective Speaking	3	·			
MTH105	Math for Allied Health^	3				
or MTH124	or Statistics $^{\Omega}$	<b>or</b> 3	Check for prerequisites			
NTR121	Nutrition for Health	3	IDS102 or Proficiency			
PHL122	Ethics	3				
	TOTAL	20				
	TOTAL CREDIT HOURS 33					

<sup>^</sup>Based on SSC placement scores.

 $\Omega$  MTH124 should be taken by students planning to transfer to a four-year institution.

#BIO121 and BIO122 can be substituted for BIO127

Students completing this one-year certificate may be eligible to also receive a Dietary Manager Career-Enhancement Certificate (3566).

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

ONE-YEAR CERTIFICATE

**DIETARY MANAGER** 

3564

#### FULL-TIME STUDENT ADVISING NOTES

#### Academic Advising

Each student should make an appointment to see their advisor every semester before registering for classes. Please have your registration form completed, including the courses you wish to take, for this meeting.

#### Course Sequence

The semester-by-semester listing below provides the normal scheduling option for students seeking a one-year certificate.

	g	Credit Hours	Pre- and Co-requisites
<u>First Semester</u> SSC101	Student Success Seminar^^	1	Take first semester
DMA135	Food Operations Directed Practice	1	Co-NTR130 or Permission
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
NTR121	Nutrition for Health	3	IDS102 or Proficiency
NTR130	Food Operations	3	
PHL122	Ethics	<u>3</u> 14	
Second Semester			
BIO127	Human Biology # (lab)	4	
DMA145	Nutrition Management Directed Practice	1	NTR121 and Pre-Co-NTR122 or Permission
DMA155	Dietary Systems Directed Practice	1	Co-DTR228 or Permission
DTR122	Life Cycle Nutrition	3	NTR121
DTR228	Dietary Systems	3	
NTR122	Introduction to Medical Nutrition Therapy	$\frac{1}{13}$	NTR121
Third Semester			
COM121	Effective Speaking	3	
MTH105 or MTH124	Math for Allied Health $^{\wedge}$ or Statistics $^{\wedge}$ $\Omega$	3 or 3 6	Check for prerequisites
	TOTAL CREDITS	33	

See first page for footnotes



#### CAREER ENHANCEMENT CERTIFICATE

### **Medical Billing Specialist**

**2024-25 Catalog**Effective Summer 2024

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3057



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing.

Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Medical Technology Programs Department

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		
HIT101	Introduction to Medical Billing	3		
HIT102	Medical Claims Methodology	4	HIT101	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
HIT123	Healthcare Legal and Ethical Issues	2	HIT230 or Co-HIT121	
HIT230	Health Care Delivery in the U.S.	2		
	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BIO125	Medical Terminology	3	
HIT101	Introduction to Medical Billing	3	
HIT230	Health Care Delivery in the U.S.	<u>2</u>	
		9	
Second Semester			
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 or Proficiency
HIT123	Healthcare Legal and Ethical Issues	2	HIT230 or Co-HIT121
HIT102	Medical Claims Methodology	4	HIT101
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
		12	
	TOTAL CREDITS	21	

<sup>^</sup>Based upon SSC placement score

Minimum grade of "C" in all technical and non-technical courses in the program curriculum is required.

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



#### CAREER ENHANCEMENT CERTIFICATE



3102

**2024-25 Catalog** 

Effective Summer 2024

pre-3103



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Medical Technology Programs Department

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		
COM122	Interpersonal Communications	3		
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MAT234	Introduction to Phlebotomy	3	(IDS102 <b>or</b> Proficiency) and Admission to the program	
	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.

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
MAT234	Introduction to Phlebotomy	3	(IDS102 <b>or</b> Proficiency) and Admission to the program
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 or Proficiency
BIO125	Medical Terminology	<u>3</u>	
		10	
Second Semester			
COM122	Interpersonal Communications	3	
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
		6	
	TOTAL CREDITS	16	

<sup>^</sup>Based upon SSC placement score

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



## CAREER ENHANCEMENT CERTIFICATE **DENTAL ASSISTING**

2024-25 Catalog Effective Summer 2024

3403



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

#### Allied Dental Health Professions Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co- Requisites	Completed Sem./Year
DAS121	Dental Assisting Techniques I**	3		
DAS122	Dental Assisting Radiography	3		
DAS123	Dental Assisting Techniques II	3	DAS121	
DAS124	Dental Assisting Materials	2		
DAS125	Dental Assisting Specialty#	3	DAS123	
DAS128	Introduction to Dental Terminology and Basic Anatomy	2		
	Total	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		Credits Hours	Pre- and Co-requisites
DAS121	Dental Assisting Techniques I**	3	
DAS124	Dental Assisting Materials	2	
DAS128	Introduction to Dental Terminology and Basic Anatomy	<u>2</u>	
	•	7	
Second Semester			
DAS122	Dental Assisting Radiography	3	
DAS123	Dental Assisting Techniques II	<u>3</u>	DAS121
		6	
Optional Third Semester			
DAS125	Dental Assisting Specialty#	<u>3</u>	DAS 123
		3	

#### TOTAL CREDITS

16

Minimum grade of "C" in all technical courses is required.

<sup>\*\*</sup>Course may be taken in conjunction with other technical courses, but must be taken in the first semester of technical course work.

<sup>#</sup>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.



## CAREER ENHANCEMENT CERTIFICATE

**EXPANDED FUNCTIONS DENTAL AUXILIARY** 

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357.09(K):15-13-06.

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Health and Public Services Division

Allied Dental Health Professions Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DAS125	Dental Assisting Specialty#	3		
DAS225	Dental Morphology for the Expanded Functions Dental Auxiliary	2	Co-DAS226 and Co-DAS227	
DAS226	Expanded Dental Assisting I	2	Co-DAS225 and Co-DAS227	
DAS227	Expanded Dental Assisting II	4	Co-DAS225 and Co-DAS226	
DAS228	Directed Clinical Practice	5	DAS225 and DAS226 and DAS227	
	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
DAS125	Dental Assisting Specialty#	3	
DAS225	Dental Morphology for the Expanded Functions Dental Auxiliary	2	Co-DAS226 and Co-DAS227
DAS226	Expanded Dental Assisting I	2	Co-DAS225 and Co-DAS227
DAS227	Expanded Dental Assisting II	<u>4</u>	Co-DAS225 and Co-DAS226
		11	00 D110 <b>22</b> 0
Second Semester			
DAS228	Directed Clinical Practice	<u>5</u>	DAS225 and DAS226 and DAS227
	TOTAL CREDITS	16	

#Because DAS125 provides the clinical practice experience needed to meet the clinical experience requirement for the EFDA program, applicants must select the "Clinical Practice" option ("Option A") for this course. Please see the College Catalog for additional information regarding this course.



## CAREER ENHANCEMENT CERTIFICATE SPORTS MASSAGE SPECIALIST

## 2024-25 Catalog

Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to

Policy No. 3357:15-13-28.

Health and Public Services Division

Therapy & Wellness Programs Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO123	Principles of Human Structure and Function#	5	BIO101 or Proficiency	
MAS121	Massage Therapy I+	5		
MAS231	Sports Massage+	2	MAS121	
NTR121	Nutrition for Health^++	3	IDS102 or Proficiency	
EXS110	Anatomy of Exercise++	3	Co-BIO122 or Co-BIO123 and Co-EXS110L	
EXS110L	Anatomy of Exercise Lab++	1	Co-EXS110	
	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
BIO123	Principles of Human Structure and Function#	5	BIO101 or Proficiency
MAS121	Massage Therapy I+	<u>5</u>	
		10	
Second Semeste	<u>r</u>		
EXS110	Anatomy of Exercise++	3	Co-BIO122 or Co-BIO123 and Co-EXS110L
EXS110L	Anatomy of Exercise Lab++	1	Co-EXS110
MAS231	Sports Massage+	2	MAS121
NTR121	Nutrition for Health^++	<u>3</u>	IDS102 or Proficiency
		9	
	TOTAL CREDITS	19	

<sup>^</sup>Based on SSC placement scores.

<sup>+</sup>Minimum grade of "B" required.

<sup>++</sup>Minimum grade of "C" required.

<sup>#</sup> BIO121 and BIO122 can be substituted for BIO123.

<sup>▲</sup> 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.

<sup>@</sup>Application criteria requires a "C" or better in BIO101 or HS BIO to apply to the Massage program



### CAREER ENHANCEMENT CERTIFICATE

### **DIETARY MANAGER**

Refer to Policy No. 3357:15-13-28.

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing.

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Health and Public Services Division

Therapy & Wellness Programs Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NTR121	Nutrition for Health	3	IDS102 or Proficiency	
NTR122	Introduction to Medical Nutrition Therapy	1	NTR121	
NTR130	Food Operations	3		
DTR122	Life Cycle Nutrition	3	NTR121	
DTR228	Dietary Systems	3		
DMA135	Food Operations Directed Practice	1	Co-NTR130 or Permission	
DMA145	Nutrition Management Directed Practice	1	NTR121 <b>and</b> Pre-Co- NTR122 <b>or</b> Permission	
DMA155	Dietary Systems Directed Practice	1	Co-DTR228 or Permission	
	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
DMA135	Food Operations Directed Practice	1	Co-NTR130 or Permission
NTR121	Nutrition for Health	3	IDS102 or Proficiency
NTR130	Food Operations	<u>3</u>	
		7	
Second Semester			
DMA145	Nutrition Management Directed Practice	1	NTR121 and Pre-Co-NTR122 or Permission
DMA155	Dietary Systems Directed Practice	1	Co-DTR228 or Permission
DTR228	Dietary Systems	3	
NTR122	Introduction to Medical Nutrition Therapy	1	NTR121
DTR122	Life Cycle Nutrition	<u>3</u>	NTR121
		9	
	TOTAL CREDITS	16	



### career community:

human services, social services and public safety

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. 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.



### ASSOCIATE OF APPLIED SCIENCE

**HUMAN AND SOCIAL SERVICES** 

**2024-25 Catalog** Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Human Services and Justice Studies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
GER121	Introduction to Gerontology	3		
HJS250	Human Services and Justice Studies Practicum and Seminar	3	CJS240 or GLS123 or SWK130 or CDC222	
SWK121	Introduction to Social Welfare++^	3	IDS102 or Proficiency	
SWK124	Methods in Practice I++	3	SWK121	
SWK125	Substance Abuse^	3	IDS102 or Proficiency	
SWK126	Human Behavior in the Social Environment++^	3	IDS102 or Proficiency	
SWK127	Group Processes++	3		
SWK130	Methods in Practice II++	3	SWK124	
SWK224	Poverty in the U.S.++	3	SWK121 and ENG124	
SWK225	Victimization and Crisis Intervention	3	ENG124	
	Total	30		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
BIO127	Human Biology	4		
BUS122	Basic Economics ^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or	Check for prerequisites	
MTH124	Statistics <sup>^</sup> Ω	3		
PSC121	U.S. Government and Politics	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC225	Diversity in American Society++	3	IDS102 or Proficiency	
	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement scores.

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.

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

<sup>++</sup>Minimum grade of "C" required.

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

### **HUMAN AND SOCIAL SERVICES**

#### 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester.
SWK121	Introduction to Social Welfare++^	3	IDS102 or Proficiency
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
SOC121	Sociology^	3	IDS102 or Proficiency
COM121	Effective Speaking	3	
ITD122	Computer Applications for Professionals^	<u>3</u>	ITD100 or Proficiency
		16	
Second Semester			
MTH118	Quantitative Reasoning^	3	
or	or	or	Check for prerequisites
MTH124	Statistics <sup>Δ</sup> Ω	3	
SWK124	Methods in Practice I++	3	SWK121
SWK224	Poverty in the U.S.++	3	SWK121 and ENG124
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
BIO127	Human Biology	<u>4</u> 16	
		16	
Third Semester			
SWK130	Methods in Practice II++	3	SWK124
SWK126	Human Behavior in the Social Environment++^	3	IDS102 or Proficiency
SOC225	Diversity in American Society ++	3	IDS102 or Proficiency
SWK125	Substance Abuse^	3	IDS102 or Proficiency
SWK225	Victimization and Crisis Intervention	3 <u>3</u>	ENG124
		15	
Fourth Semester			
PSC121	U.S. Government and Politics	3	
BUS122	Basic Economics^	3	IDS102 or Proficiency
HJS250	Human Services and Justice Studies Practicum	3	CJS240 or GLS123 or
	and Seminar		SWK130 or CDC222
GER121	Introduction to Gerontology	3	
SWK127	Group Processes++	3 15	
		15	
	TOTAL CREDITS	62	

Please see footnotes on page one



#### ASSOCIATE OF APPLIED SCIENCE

### **HUMAN AND SOCIAL SERVICES –**

2024-25 Catalog Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**GERONTOLOGY MAJOR** 

Health and Public Services Division

Human Services and Justice Studies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
GER121	Introduction to Gerontology	3		
GER122	Psychosocial Aspects of Aging++	3		
HJS250	Human Services and Justice Studies Practicum and Seminar	3	CJS240 or GLS123 or SWK130 or CDC222	
SWK121	Introduction to Social Welfare++^	3	IDS102 or Proficiency	
SWK124	Methods in Practice I++	3	SWK121	
SWK125	Substance Abuse^	3	IDS102 or Proficiency	
SWK126	Human Behavior in the Social Environment++^	3	IDS102 or Proficiency	
SWK130	Methods in Practice II++	3	SWK124	
SWK224	Poverty in the U.S.++	3	SWK121 and ENG124	
SWK230	Social Services for the Elderly++	3	ENG124	
	Total	30		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
BIO127	Human Biology	4		
BUS122	Basic Economics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition ^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or	Check for prerequisites	
MTH124	Statistics <sup>Δ</sup> Ω	3		
PSC121	U.S. Government and Politics	3		
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC225	Diversity in American Society++	3	IDS102 or Proficiency	
_	Total	32		
	TOTAL CREDIT HOURS	62		

<sup>^</sup>Based on SSC placement scores.

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.

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

<sup>++</sup>Minimum grade of "C" required.

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

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# HUMAN AND SOCIAL SERVICES – GERONTOLOGY MAJOR

1003

#### 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
COM121	Effective Speaking	3	•
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
GER121	Introduction to Gerontology	3	
SOC121	Sociology^	3	IDS102 or Proficiency
SWK121	Introduction to Social Welfare++^	<u>3</u>	IDS102 or Proficiency
		16	
Second Semester			
BIO127	Human Biology	4	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
MTH118	Quantitative Reasoning^	3	
or	or	or	Check for prerequisites
MTH124	Statistics <sup>^</sup> Ω	3	
SWK124	Methods in Practice I++	3	SWK121
SWK224	Poverty in the U.S.++	<u>3</u>	SWK121 and ENG124
	·	16	
Third Semester			
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
SOC225	Diversity in American Society ++	3	IDS102 or Proficiency
SWK125	Substance Abuse^	3	IDS102 or Proficiency
SWK126	Human Behavior in the Social Environment++^	3	IDS102 or Proficiency
SWK130	Methods in Practice II++	<u>3</u>	SWK124
		15	
Fourth Semester			
BUS122	Basic Economics^	3	IDS102 or Proficiency
GER122	Psychosocial Aspects of Aging++	3	•
HJS250	Human Services and Justice Studies Practicum and Seminar	3	CJS240 or GLS123 or SWK130 or CDC222
PSC121	U.S. Government and Politics	3	2
SWK230	Social Services for the Elderly++	<u>3</u>	ENG124
	•	15	
	TOTAL CREDITS	62	

Please see footnotes on page one



# ASSOCIATE OF APPLIED SCIENCE HUMAN AND SOCIAL SERVICES – CHEMICAL DEPENDENCY MAJOR

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Human Services and Justice Studies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
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	
HJS250	Human Services and Justice Studies Practicum and Seminar	3	CJS240 or GLS123 or SWK130 or CDC222	
SWK121	Introduction to Social Welfare++^	3	IDS102 or Proficiency	
SWK125	Substance Abuse++^	3	IDS102 or Proficiency	
SWK126	Human Behavior in the Social Environment++^	3	IDS102 or Proficiency	
SWK224	Poverty in the U.S.++	3	SWK121 and ENG124	
SWK225	Victimization and Crisis Intervention	3	ENG124	
	Total	32		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
BIO127	Human Biology	4		
BUS122	Basic Economics^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
ENG124	College Composition ^	3	Co-ENG024 or Co- ENG011 or Proficiency	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or	or	or	Check for prerequisites	
MTH124	Statistics <sup>Δ</sup> Ω	3		
PSC121	U.S. Government and Politics	3		
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC225	Diversity in American Society++	3	IDS102 or Proficiency	
	Total	32		
	TOTAL CREDIT HOURS	64		

<sup>^</sup>Based on SSC placement scores.

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

<sup>++</sup>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.

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

Effective Summer 2024

# HUMAN AND SOCIAL SERVICES – CHEMICAL DEPENDENCY MAJOR

1004

#### **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.

First Semester		<u>Credit</u> Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
COM121	Effective Speaking	3	Taive just semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
21,012.	contge composition	J	Proficiency
SOC121	Sociology^	3	IDS102 or Proficiency
SWK121	Introduction to Social Welfare++^	3	IDS102 or Proficiency
SWK125	Substance Abuse++^	<u>3</u>	IDS102 or Proficiency
		16	
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
CDC224	Chemical Dependency and Ethics++	1	SWK125
MTH118	Quantitative Reasoning^	3	
or	or	or	Check for prerequisites
MTH124	Statistics $^{}\Omega$	3	
PSC121	U.S. Government and Politics	3	
SWK224	Poverty in the U.S.++	<u>3</u>	SWK121 and ENG124
	·	<del>-</del> 7	
Third Semester			
CDC221	Chemical Dependency and the Family++	3	SWK125
CDC222	Fundamentals of Chemical Dependency Practice II++	3	CDC122
ITD122	Computer Applications for Professionals <sup>^</sup>	3	ITD100 or Proficiency
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
SWK126	Human Behavior in the Social Environment++^	3	IDS102 or Proficiency
SWK225	Victimization and Crisis Intervention	<u>3</u>	ENG124
		18	
Fourth Semester			
BUS122	Basic Economics^	3	IDS102 or Proficiency
HJS250	Human Services and Justice Studies Practicum and	3	CJS240 or GLS123 or
	Seminar		SWK130 or CDC222
SOC225	Diversity in American Society ++	3	IDS102 or Proficiency
BIO127	Human Biology	<u>4</u>	
		13	
	TOTAL CREDITS	64	

Please see footnotes on page one



#### ASSOCIATE OF APPLIED SCIENCE

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**2024-25 Catalog**Effective Summer 2024

### 1009

# HUMAN AND SOCIAL SERVICES – COMMUNITY CORRECTIONS

MY ACADEMIC PLAN

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Human Services and Justice Studies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CJS121	Introduction to Criminal Justice++	3		
CJS129	Corrections++	3	CJS121	
CJS221	Criminology	3	CJS121	
CJS223	Criminal Procedure	3	CJS121	
HJS250	Human Services and Justice Studies Practicum and Seminar	3	CJS240 or GLS123 or SWK130 or CDC222	
SWK121	Introduction to Social Welfare++^	3	IDS102 or Proficiency	
SWK124	Methods in Practice I++	3	SWK121	
SWK130	Methods in Practice II++	3	SWK124	
SWK125	Substance Abuse^	3	IDS102 or Proficiency	
SWK126	Human Behavior in the Social Environment++^	3	IDS102 or Proficiency	
SWK225	Victimization and Crisis Intervention	3	ENG124	
	Total	33		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
BIO127	Human Biology	4		
COM121	Effective Speaking	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
MTH118	Quantitative Reasoning^	3		
or MTH124	or Statistics^Ω	or 3	Check for prerequisites	
PSY121	General Psychology^	3	IDS102 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC222	Juvenile Delinquency	3	SOC121	
0r	Or	or	0r	
PSY221 SOC225	Abnormal Psychology  Diversity in American Society++	3	PSY121 IDS102 or Proficiency	
300223	Total	32	1D3102 <b>01</b> Fronciency	
	TOTAL CREDIT HOURS	65		

<sup>^</sup>Based upon SSC placement score.

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

<sup>++</sup>Minimum grade of "C" required.

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

Effective Summer 2024

# HUMAN AND SOCIAL SERVICES – COMMUNITY CORRECTIONS

1009

#### 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CJS121	Introduction to Criminal Justice++	3	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
SWK121	Introduction to Social Welfare++^	3	IDS102 or Proficiency
SWK125	Substance Abuse^	<u>3</u>	IDS102 or Proficiency
		16	•
Second Semester			
CJS129	Corrections++	3	CJS121
CJS221	Criminology	3	CJS121
ENG221	Technical Report Writing	3	ENG124
MTH118	Quantitative Reasoning^	3	
or	or	or	Check for prerequisites
MTH124	Statistics $^{\wedge}\Omega$	3	entrage. Procequiation
SWK124	Methods in Practice I++	3	SWK121
SWK126	Human Behavior and the Social Environment++^	<u>3</u>	IDS102 or Proficiency
		18	,
Third Semester			
CJS223	Criminal Procedure	3	CJS121
COM121	Effective Speaking	3	505121
SOC222	Juvenile Delinquency	3	SOC121
or	or	or	or
PSY221	Abnormal Psychology	3	PSY121
SWK130	Methods in Practice II++	3	SWK124
SWK225	Victimization & Crisis Intervention	<u>3</u>	ENG124
		15	
Fourth Semester			
BIO127	Human Biology	4	
HJS250	Human Services and Justice Studies Practicum and	3	CJS240 or GLS123 or SWK130
	Seminar		or CDC222
PSY121	General Psychology^	3	IDS102 or Proficiency
SOC121	Sociology^	3	IDS102 or Proficiency
SOC225	Diversity in American Society ++	<u>3</u>	IDS102 or Proficiency
		16	
	TOTAL CREDITS	65	

Please see footnotes on page one



## ASSOCIATE OF APPLIED SCIENCE POLICE SCIENCE

2024-25 Catalog

Effective Summer 2024

**1300** 



The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357: 15-13-06.

Health and Public Services Division

Human Services and Justice Studies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CJS140	Law Enforcement Academy I^++	12	IDS102 or Proficiency	
CJS240	Law Enforcement Academy II++	12	CJS140	
CJS221	Criminology	3	CJS121	
HJS250	Human Services and Justice Studies Practicum and Seminar	3	CJS240 or GLS123 or SWK130 or CDC222	
	Total	30		
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	Co-ENG024 or Co-ENG011 or Proficiency	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
PHL122	Ethics	3		
CHM105	Introduction to Forensic Science (lab)	3		
SOC225	Diversity in American Society	3	IDS102 or Proficiency	
CJS121	Introduction to Criminal Justice	3		
PSY121	General Psychology <sup>1</sup> (recommended)	3	IDS102 or Proficiency	
MTH118	Quantitative Reasoning <sup>2</sup> (recommended)	3	Check for prerequisites	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
	Total	31		
	TOTAL CREDIT HOURS	61		

<sup>^</sup>Based on SSC placement scores

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 Officer 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. Please send an email to LEAinfo@starkstate.edu for more information.

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

<sup>++</sup>Minimum grade of "C" required.

Or select from one of the following choices: PSC121, PSY221, SOC121, SOC123, SOC221, SOC222

<sup>&</sup>lt;sup>2</sup> Or select from one of the following choices: MTH124

Effective Summer 2024

#### 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.

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
			Proficiency
CJS121	Introduction to Criminal Justice	3	
CHM105	Introduction to Forensic Science (lab)	3	
MTH118	Quantitative Reasoning <sup>^2</sup> (recommended)	3	Check for prerequisites
PSY121	General Psychology (recommended)	3 <u>3</u>	IDS102 or Proficiency
		16	
Second Semester			
CJS140	Law Enforcement Academy I^++	12	IDS102 or Proficiency
ENG231	College Composition II	3 15	ENG124
		15	
Third Semester			
CJS240	Law Enforcement Academy II++	12	CJS140
CJS221	Criminology	3 15	CJS121
		15	
Fourth Semester			
COM121	Effective Speaking	3	
ITD122	Computer Applications for	3	ITD100 or Proficiency
	Professionals ^		
PHL122	Ethics	3	
SOC225	Diversity in American Society	3 <u>3</u>	IDS102 or Proficiency
HJS250	Human Services and Justice Studies	<u>3</u>	CJS240 or GLS123 or
	Practicum and Seminar		SWK130 or CDC222
		15	
	TOTAL CREDITS	61	

Please see footnotes on page one



## ONE-YEAR CERTIFICATE

**POLICE SCIENCE** 

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Health and Public Services Division

Human Services and Justice Studies Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CJS140	Law Enforcement Academy I^++	12	IDS102 or Proficiency	
CJS240	Law Enforcement Academy II++	12	CJS140	
CJS121	Introduction to Criminal Justice	3		
CJS221	Criminology	3	CJS121	
	Total	30		
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	Co-ENG024 or Co-ENG011 or Proficiency	
PSY121	General Psychology^	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
	Total	10		
	TOTAL CREDIT HOURS	40		

<sup>^</sup>Based on SSC placement score.

**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.

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

<sup>++</sup>Minimum grade of "C" required.

## ONE-YEAR CERTIFICATE POLICE SCIENCE

1302

#### 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 students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CJS140	Law Enforcement Academy I^++	12	IDS102 or Proficiency
CJS121	Introduction to Criminal Justice	3	
COM121	Effective Speaking	<u>3</u>	
		19	
Second Semester			
CJS240	Law Enforcement Academy II++	12	CJS140
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
PSY121	General Psychology^	3	IDS102 or Proficiency
CJS221	Criminology	<u>3</u>	CJS121
		21	
	TOTAL CREDITS	40	

<sup>^</sup>Based on SSC placement score.

**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.

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

<sup>++</sup>Minimum grade of "C" required.



## ASSOCIATE OF ARTS CRIMINAL JUSTICE

**2024-25 Catalog** 

Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357: 15-13-06.

Health and Public Services Division

Human Services and Justice Studies Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXP	ERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
COMPUTER APP				
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENGLISH COMP	OSITION & ORAL COMMUNICATION: 9 credit h	ours minimum	Co-ENG024 or Co-ENG011 or	
ENG124	College Composition <sup>^</sup> (required)	3	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	IDS102 or Proficiency	
SOCIAL & BEHA	VIORAL SCIENCES: 12 credit hours minimum			
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency	
PSC121	U.S. Government and Politics	3		
PSC221	State and Local Government	3	IDS102 or Proficiency	
PSC222	Public Policy	3	PSC121	
PSY121	General Psychology^	3	IDS102 or Proficiency	
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	
CRIMINAL JUST	ICE: 18 credit hours required		1	
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 & HUMAN	ITIES: 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	

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### **CRIMINAL JUSTICE**

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Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
HIS121	U.S. History I to 1877	3		Sellin Tent
HIS122	U.S. History II from 1877	3		
HIS221	World Civilization to 17th Century	3		
HIS222	World Civilization from 17th Century	3		
BIO121	Anatomy and Physiology I (lab)^ A	ed) 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		
CHM100	Exploring Science and Technology (lab)	4		
CHM101	Introduction to Chemistry^ ▲	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107 or Proficiency	
CHM105	Introduction to Forensic Science (lab)	3		
CHM123	General, Organic, and Biological Chemistry	4	(MTH024 or MTH025 or proficiency) or MTH105 or MTH107 or (CHM101 or proficiency)	
CHM243	Biochemistry I	3	CHM123 or CHM141	
CHM141	General Chemistry I (lab)	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab) ▲+	5	CHM141	
CHM205	Forensic Chemistry (lab)	4	CHM105 or CHM141 or CHM123	
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 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	
PHY105	Astronomy (lab)	4		
MATHEMATICS, ST	ATISTICS AND LOGIC: 3 semester credit hours require	ed		
MTH118	Quantitative Reasoning^	3	Pre-Co-MTH018 or MTH022 or MTH023 or Proficiency	
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency	
MTH125	College Algebra^	4	MTH023 or Pre-Co-MTH025 or Proficiency	
ELECTIVE: θ-3 credi	t hours -Students may select one additional course from abo	ove or choose one ele	ective course from the list below.	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
PSC122 PSY124	Introduction to Law and the Legal System^ Industrial/Organizational Psychology	3 3	IDS102 or Proficiency	
SPN100	Elementary Spanish I	4	+	
SPN200	Elementary Spanish II • +	4	SPN100 or Proficiency	
SSC201	Study Away: Experiential Learning	1	Successful completion of 15 or more college credits, age 18 or older, permission of instructor	
	TOTAL CREDIT HO	URS 60-63		<del></del>

See last page for footnotes

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Effective Summer 2024

#### 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> 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.

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or
			Proficiency
PHL122	Ethics	3	
CJS121	Introduction to Criminal Justice	3	
Social & Behavio	ral Sciences Elective <sup>4</sup>	<u>3</u>	Check for prerequisites
		16	
Second Semester			
	tistics and Logic Elective <sup>6</sup>	3-4	Check for prerequisites
Natural Sciences		3-5	Check for prerequisites
Social & Behavio	ral Sciences Elective <sup>4</sup>	3	Check for prerequisites
CJS124	Policing	3	CJS121
CJS129	Corrections	<u>3</u>	CJS121
		15-18	
Third Semester			
Natural Sciences	Elective $\wedge^2$	3-5	Check for prerequisites
English Composit	tion & Oral Communication Elective <sup>3</sup>	3	Check for prerequisites
SOC225	Diversity in American Society	3	IDS102 or Proficiency
CJS221	Criminology	3	CJS121
CJS222	Criminal Law in the United States	<u>3</u>	CJS121
		15-17	
Fourth Semester			
Arts & Humanitie	es Elective <sup>1</sup>	3	Check for prerequisites
	tion & Oral Communication Elective <sup>3</sup>	3	Check for prerequisites
Social & Behavio	ral Sciences Elective <sup>4</sup>	3	Check for prerequisites
Elective 5 (If need	ed)	0-3	Check for prerequisites
CJS223	Criminal Procedure	<u>3</u>	CJS121
		12-15	
	TOTAL CREDITS	60-63	

<sup>^</sup>Based on SSC placement scores

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

<sup>▲</sup> 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.

<sup>&</sup>lt;sup>1</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222

<sup>&</sup>lt;sup>2</sup> Natural Sciences Electives: BIO121, BIO122, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, CHM100, CHM101, CHM105, CHM123, CHM243, CHM141, CHM142, CHM205, PHY101, PHY105, PHY121, PHY122

<sup>&</sup>lt;sup>3</sup> English Composition & Oral Communication Electives: COM121, COM122, COM123, ENG221, ENG230, ENG231,

<sup>4</sup> Social & Behavioral Sciences Electives: PSC121, PSC221, PSC222, PSY121, PSY220, PSY221, SOC121, SOC123, SOC221, SOC222

<sup>&</sup>lt;sup>5</sup> Elective (If needed): BUS221, BUS222, PSC122, PSY124, SPN100, SPN200, SSC201

<sup>&</sup>lt;sup>6</sup> Mathematics, Statistics and Logic Electives: MTH118, MTH124, MTH125



## ASSOCIATE OF ARTS POLITICAL SCIENCE

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Health and Public Services Division

Human Services and Justice Studies Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXP	ERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
COMPUTER APP		ı	Г	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENGLISH COMPO	OSITION & ORAL COMMUNICATION: 6 credit hour	s minimum	Co-ENG024 or Co-	
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	IDS102 or Proficiency	
MATHEMATICS,	STATISTICS AND LOGIC: 3 credit hours minimum			
MTH118	Quantitative Reasoning^	3	Pre-Co-MTH018 or MTH022 or MTH023 or Proficiency	
MTH124	Statistics^	3	MTH022 or Pre-Co- MTH024 or Proficiency	
MTH125	College Algebra^	4	MTH023 or Pre-Co- MTH025 or Proficiency	
ARTS & HUMANI	TIES: 6 credit hours minimum across two disciplines			
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		
PHL122	Ethics	3		
	VIORAL SCIENCES: 6 credit hours minimum across tw		IDG100 F 7 :	
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency	
CJS121	Introduction to Criminal Justice	3		
CJS124	Policing	3	CJS121	
CJS129	Corrections	3	CJS121	
CJS221	Criminology	3	CJS121	
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY124	Industrial/Organizational Psychology	3		
PSY220	Social Psychology	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
SOC121	Sociology^	3	IDS102 or Proficiency	

See last page for footnotes

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
SOC221	Social Problems	3	SOC121	
NATURAL SCIEN	NCES: 6 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)	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		
CHM100	Exploring Science and Technology (lab)	4		
CHM101	Introduction to Chemistry^▲	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107 or Proficiency	
CHM105	Introduction to Forensic Science (lab)	3		
CHM123	General, Organic, and Biological Chemistry	4	(MTH024 or MTH025 or proficiency) or MTH105 or MTH107 or (CHM101 or proficiency)	
CHM243	Biochemistry I	3	CHM123 or CHM141	
CHM141	General Chemistry I (lab)	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab) ▲+	5	CHM141	
CHM205	Forensic Chemistry (lab)	4	CHM105 or CHM141 or CHM123	
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 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	
PHY105	Astronomy (lab)	4		
	TRATION - POLITICAL SCIENCE: 18 credit hours	required		
PSC121	U.S. Government and Politics	3		
PSC130	Introduction to Public Administration	3		
PSC140	Comparative Government and Politics	3		
PSC221	State and Local Government	3		
PSC230	Introduction to Political Thought	3		
Elective	Select from PSC122, PSC123, PSC222, HJS250	3		

See last page for footnotes

ADDITIONAL ELECTIVES FROM THIS SHEET TO COMPLETE DEGREE				
Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ASL122	American Sign Language I	4		
ASL124	American Sign Language II	4	ASL122	
ASL221	American Sign Language III	4	ASL124	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
CJS222	Criminal Law in the United States	3	CJS121	
CJS223	Criminal Procedure	3	CJS121	
COM229	Persuasion	3	IDS102 or Proficiency	
ENG227	Writing for the Media	3	ENG124	
ENG229	Grant Writing	3	ENG124	
ENG230	Business Communications	3	ENG124	
SPN100	Elementary Spanish I	4		
SPN200	Elementary Spanish II▲+	4	SPN100	
SSC201	Study Away: Experiential Learning	1	Successful completion of 15 or more college credits, age 18 or older, permission of instructor	
	TOTAL CREDIT HOURS	60-64		

See last page for footnotes

### 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 <a href="http://www.transfer.org/uselect">http://www.transfer.org/uselect</a> 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.

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
PSC121	U.S. Government and Politics	3	
Arts & Humanitie	s Elective <sup>1</sup>	3	Check for prerequisites
Mathematics, Sta	tistics and Logic Elective <sup>6</sup>	<u>3-4</u>	Check for prerequisites
		16-17	
Second Semester			
PSC130	Introduction to Public Administration	3	
PSC140	Comparative Government and Politics	3	
SOC225	Diversity in American Society	3	IDS102 or Proficiency
English Composit	tion & Oral Communication Elective <sup>3</sup>	3	Check for prerequisites
Arts & Humanitie		3	Check for prerequisites
Natural Sciences	<i>Elective</i> <sup>▶ 2</sup>	<u>3-5</u>	Check for prerequisites
		18-20	
Third Semester			
PSC221	State and Local Government	3	
	ion & Oral Communication Elective <sup>3</sup>	3	Check for prerequisites
Natural Sciences	Elective <sup>▲ 2</sup>	3	Check for prerequisites
Elective $^{5}$		3-5 12-14	Check for prerequisites
		12-14	
Fourth Semester			
PSC230	Introduction to Political Thought	3	
Elective 5 (If need		1-4	Check for prerequisites
Natural Sciences	Elective $\wedge^2$	3-5	Check for prerequisites
Social & Behavio	ral Sciences Elective <sup>4</sup>	3	Check for prerequisites
Political Science	Elective	<u>3</u>	Check for prerequisites
		13-18	
	TOTAL CREDITS	60-64	

<sup>^</sup>Based on SSC placement scores

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

A 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.

<sup>&</sup>lt;sup>1</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222

<sup>&</sup>lt;sup>2</sup> Natural Sciences Electives: BIO121, BIO122, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, CHM100, CHM101, CHM105, CHM123, CHM243, CHM141, CHM142, CHM205, PHY101, PHY105, PHY121, PHY122

<sup>&</sup>lt;sup>3</sup> English Composition & Oral Communication Electives: COM121, COM122, COM123, ENG221, ENG230, ENG231,

<sup>&</sup>lt;sup>4</sup> Social & Behavioral Sciences Electives: PSC121, PSC221, PSC222, PSY121, PSY220, PSY221, SOC121, SOC123, SOC221, SOC222

<sup>&</sup>lt;sup>5</sup> Elective (If needed): BUS221, BUS222, PSC122, PSY124, SPN100, SPN200, SSC201

<sup>&</sup>lt;sup>6</sup> Mathematics, Statistics and Logic Electives: MTH118, MTH124, MTH125



# ASSOCIATE OF APPLIED SCIENCE **EMERGENCY MEDICAL SERVICES**

**2024-25 Catalog** 

Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

**Emergency Services Department** 

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EMS122	Paramedic I+▲	7	BIO101 and EMS121 and Co-EMS124	
EMS124	Paramedic I Clinical+▲	1	BIO101 and EMS121 and Co-EMS122	
EMS221	Paramedic II+▲	7	EMS122 and EMS124 and Co-EMS223	
EMS223	Paramedic II Clinical+▲	2	EMS122 and EMS124 and Co-EMS221	
EMS222	Paramedic III+▲	5	EMS221 and EMS223 and Co-EMS226	
EMS226	Paramedic III Clinical+▲	1	EMS221 and EMS223 and Co-EMS222	
EMS224	Paramedic IV+▲	6	EMS222 and EMS226 and Co-EMS225	
EMS225	Paramedic IV Clinical+▲	1	EMS222 and EMS226 and Co-EMS224	
	Total	30		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
		1	· ·	
EMS121	Emergency Medical Technician^+#	7	IDS102 or Proficiency	
EMS121 BIO101	Emergency Medical Technician^+#  Introduction to Anatomy and Physiology^+	-	IDS102 or Proficiency IDS102 or Proficiency	
		7	,	
BIO101	Introduction to Anatomy and Physiology^+	7 3	IDS102 or Proficiency Co-ENG024 or Co-ENG011 or	
BIO101 ENG124 ITD122 MTH124 or MTH125	Introduction to Anatomy and Physiology^+  College Composition^  Computer Applications for Professionals^  Statistics^  or  College Algebra^ Ω	7 3 3 3 0r 4	IDS102 or Proficiency Co-ENG024 or Co-ENG011 or Proficiency	
BIO101  ENG124  ITD122  MTH124  or  MTH125  or  MTH105	Introduction to Anatomy and Physiology^+  College Composition^  Computer Applications for Professionals^  Statistics^ or College Algebra^ Ω or Math for Allied Health	7 3 3 3 or 4 or 3	IDS102 or Proficiency  Co-ENG024 or Co-ENG011 or  Proficiency  ITD100 or Proficiency	
BIO101  ENG124  ITD122  MTH124  or  MTH125  or  MTH105  PHL122	Introduction to Anatomy and Physiology^+  College Composition^  Computer Applications for Professionals^  Statistics^ or College Algebra^ Ω or Math for Allied Health Ethics	7 3 3 3 0r 4 0r 3 3	IDS102 or Proficiency  Co-ENG024 or Co-ENG011 or Proficiency  ITD100 or Proficiency  Check for prerequisites	
BIO101  ENG124  ITD122  MTH124  or  MTH125  or  MTH105	Introduction to Anatomy and Physiology^+  College Composition^  Computer Applications for Professionals^  Statistics^ or College Algebra^ Ω or Math for Allied Health Ethics General Psychology^	7 3 3 3 0r 4 0r 3 3 3 3	IDS102 or Proficiency  Co-ENG024 or Co-ENG011 or  Proficiency  ITD100 or Proficiency	
BIO101  ENG124  ITD122  MTH124  or  MTH125  or  MTH105  PHL122  PSY121	Introduction to Anatomy and Physiology^+  College Composition^  Computer Applications for Professionals^  Statistics^ or College Algebra^ Ω or Math for Allied Health Ethics	7 3 3 3 0r 4 0r 3 3	IDS102 or Proficiency  Co-ENG024 or Co-ENG011 or Proficiency  ITD100 or Proficiency  Check for prerequisites	
BIO101  ENG124  ITD122  MTH124  or  MTH125  or  MTH105  PHL122  PSY121  BIO125	Introduction to Anatomy and Physiology^+  College Composition^  Computer Applications for Professionals^  Statistics^ or College Algebra^ Ω or Math for Allied Health  Ethics General Psychology^ Medical Terminology	7 3 3 3 0 4 0 3 3 3 3 3 3 3 3	IDS102 or Proficiency  Co-ENG024 or Co-ENG011 or Proficiency  ITD100 or Proficiency  Check for prerequisites	

See last page for footnotes

**2024-25 Catalog** 

**EMERGENCY MEDICAL SERVICES** 

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## 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.

First Semester		Credit Hours	Pre and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
EMS121	Emergency Medical Technician^+#	7	IDS102 or Proficiency
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 or Proficiency
MTH124	Statistics^	3	1D3102 of 1 foliciency
0r	or	or	
MTH125	College Algebra <sup>^</sup> Ω	4	Check for Pre-requisites
or	or	or	Check for Tre-requisites
MTH105	Math for Allied Health	<u>3</u>	
1,1111103	Mani 101 / Illied Health	14-15	
Second Semester			
EMS122	Paramedic I+▲	7	BIO101 and EMS121 and Co-EMS124
EMS124	Paramedic I Clinical+▲	1	BIO101 and EMS121 and Co-EMS122
ENG124	College Composition ^		Co-ENG024 or Co-ENG011 or Proficiency
		<u>3</u> 11	, and the second se
Summer			
EMS221	Paramedic II+▲	7	EMS122 and EMS124 and Co-EMS223
EMS223	Paramedic II Clinical+▲		EMS122 and EMS124 and Co-EMS221
21115223		<u>2</u> 9	EMSTEE and EMSTET and CO EMSEET
Third Semester			
EMS222	Paramedic III+▲	5	EMS221 and EMS223 and Co-EMS226
EMS226	Paramedic III Clinical+▲	1	EMS221 and EMS223 and Co-EMS222
EMS224	Paramedic IV+▲	6	EMS222 and EMS226 and Co-EMS225
EMS225	Paramedic IV Clinical+▲	1	EMS222 and EMS226 and Co-EMS224
BIO125	Medical Terminology	<u>3</u> 16	
		16	
Fourth Semester			
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
PSY121	General Psychology^	3	IDS102 or Proficiency
PHL122	Ethics	3	
FST224	Legal Aspects of Fire Service	2	
	<i>G</i> 1	<u>2</u> 11	
	Total Credits	61-62	

<sup>^</sup>Based on SSC placement score.

#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.

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

<sup>+</sup>Minimum grade of "B" required.

<sup>++</sup>Minimum grade of "C" required.

 $<sup>\</sup>Omega$  MTH125 should be taken by students planning to transfer to a four-year institution.

<sup>▲</sup> Check with your advisor prior to registering.



## ASSOCIATE OF APPLIED SCIENCE

## The catalog in force is assigned to students based on the academic year they first applied to the college, and

**EMERGENCY FIRE SERVICES** 

changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Pre-3555

## Health and Public Services Division

## Emergency Services Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EMS122	Paramedic I+▲	7	BIO101 and EMS121 and Co-EMS124	
EMS124	Paramedic I Clinical+▲	1	BIO101 and EMS121 and Co-EMS122	
EMS221	Paramedic II +▲	7	EMS122 and EMS124 and Co-EMS223	
EMS223	Paramedic II Clinical+▲	2	EMS122 and EMS124 and Co-EMS221	
EMS222	Paramedic III+▲	5	EMS221 and EMS223 and Co-EMS226	
EMS226	Paramedic III Clinical+▲	1	EMS221 and EMS223 and Co-EMS222	
EMS224	Paramedic IV+▲	6	EMS222 and EMS226 and Co-EMS225	
EMS225	Paramedic IV Clinical+▲	1	EMS222 and EMS226 and Co-EMS224	
	Total	30		
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	IDS102 or Proficiency	
BIO101	Introduction to Anatomy and Physiology^+	3	IDS102 or Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
FST228 or FST129 and FST230	Fire Fighter 1 & 2^+++ or  Take the Firefighter sequence of courses to obtain Firefighter Level 2 certification (Firefighter 1 and		IDS102 <b>or</b> Proficiency  Check for prerequisites	
or FST128 and FST 229 and FST 230	Firefighter 2 Transition)++-▲ or Take the Firefighter sequence of courses to obtain Firefighter Level 2 certification (Volunteer, Firefighter 1 Transition and Firefighter 2 Transition)++-▲	11	Check for prerequisites	
MTH124 or MTH125 or MTH105	Statistics^ or College Algebra^ Ω or Math for Allied Health	3 or 4 or 3	Check for prerequisites	
PHL122	Ethics	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
	Total	34-35	,	
	TOTAL CREDIT HOURS	64-65		

See last page for footnotes

## **EMERGENCY FIRE SERVICES**

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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.

First Semester		Credit Hours	Pre and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
EMS121	Emergency Medical Technician^+#	7	IDS102 or Proficiency
BIO101	Introduction to Anatomy & Physiology^+	3	IDS102 or Proficiency
MTH124	Statistics <sup>^</sup>	3	1D3102 of 11offelency
or	or	or	
MTH125	College Algebra^ Ω	4	Check for Pre-requisites
or	or	or	Check for 1 re-requisites
MTH105	Math for Allied Health	<u>3</u>	
WHITIOS	Iviatii for Amed Heartii	14-15	
Second Semester		14-13	
EMS122	Paramedic I+ ▲	7	BIO101 and EMS121 and Co-EMS124
	Paramedic I + ▲ Paramedic I Clinical+ ▲	7	BIO101 and EMS121 and Co-EMS124 BIO101 and EMS121 and Co-EMS122
EMS124		1	
ENG124	College Composition^	<u>3</u> 11	Co-ENG024 or Co-ENG011or Proficiency
C		11	
Summer En 1922	B	_	ELIGIDA LENGUAL LO ELIGIDA
EMS221	Paramedic II+▲	7	EMS122 and EMS124 and Co-EMS223
EMS223	Paramedic II Clinical +▲	<u>2</u> 9	EMS122 and EMS124 and Co-EMS221
		9	
Third Semester			
EMS222	Paramedic III+▲	5	EMS221 and EMS223 and Co-EMS226
EMS226	Paramedic III Clinical+▲	1	EMS221 and EMS223 and Co-EMS222
EMS224	Paramedic IV+▲	6	EMS222 and EMS226 and Co-EMS225
EMS225	Paramedic IV Clinical+ ▲	1	EMS222 and EMS226 and Co-EMS224
PSY121	General Psychology <sup>^</sup>	<u>3</u>	IDS102 or Proficiency
		16	
Fourth Semester			
PHL122	Ethics	3	
FST228	Firefighter 1 & 2^++▲	11	IDS102 or Proficiency
		11 14	·
	<b>Total Credits</b>	64-65	

<sup>^</sup>Based on SSC placement score.

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

<sup>+</sup>Minimum grade of "B" required.

<sup>++</sup>Minimum grade of "C" required.

 $<sup>\</sup>Omega$  MTH125 should be taken by students planning to transfer to a four-year institution.

<sup>#</sup>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.

<sup>▲</sup> Check with your advisor prior to registering.



## CAREER ENHANCEMENT CERTIFICATE

## **HUMAN AND SOCIAL SERVICES -GERONTOLOGY MAJOR**

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Human Services and Justice Studies Department

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.

<u>First Semester</u>		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	**++	<u>3-5</u>	
	TOTAL CREDITS	11-16	

<sup>++</sup>Minimum grade of "C" required.

<sup>\*</sup>Technical Electives 1: ENG124, HIT230, OTA223, PSY121, PSY123, SWK230

<sup>\*\*</sup>Technical Elective 2: ACC132, BIO101, BIO121, BIO122, BIO123, BIO127, MAT231



## CAREER ENHANCEMENT CERTIFICATE

## **HUMAN AND SOCIAL SERVICES -**CHEMICAL DEPENDENCY

2024-25 Catalog

Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Human Services and Justice Studies Department

Course Number	Course Title	Credits	Pre- and Co- Requisites	Completed Sem./Year
SWK125	Substance Abuse++^	3	IDS102 or Proficiency	
SWK225	Victimization and Crisis Intervention	3	ENG124	
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		

## STUDENT ADVISING NOTES

## Academic Advising

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

<u>First Semester</u> SWK125	Substance Abuse++^	Credit Hours 3	<u>Pre- and Co-requisites</u> IDS102 <b>or</b> Proficiency
SWK225	Victimization and Crisis Intervention	<u>3</u> <b>6</b>	ENG124
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++	<u>1</u>	SWK125
		7	
Third Semester			
CDC221	Chemical Dependency and the Family++	3	SWK125
CDC222	Fundamentals of Chemical Dependency Practice II++	3	CDC122
CDC224	Chemical Dependency and Ethics++	<u>1</u>	SWK125
		7	
	TOTAL CREDITS	20	

<sup>^</sup>Based on SSC placement scores.

<sup>++</sup>Minimum grade of "C" required.



# POLICE SCIENCE

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Health and Public Services Division

Human Services and Justice Studies Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
CJS140	Law Enforcement Academy I^++	12	IDS102 or Proficiency	
CJS240	Law Enforcement Academy II^++	12	CJS140	
	TOTAL CREDIT HOURS	24		

### STUDENT ADVISING NOTES

#### Academic Advising

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

<u>First Semester</u>		Credit Hours	Pre- and Co-requisites
CJS140	Law Enforcement Academy I^++	<u>12</u>	IDS102 or Proficiency
		12	
Second Semester			
CJS240	Law Enforcement Academy II^++	<u>12</u>	CJS140
		12	
	TOTAL CREDITS	24	

<sup>^</sup>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.

<sup>++</sup>Minimum grade of "C" required.



## career community:

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. 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.



## MAD

## ASSOCIATE OF APPLIED SCIENCE

## **TECHNICAL COMMUNICATIONS**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

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Arts and Sciences Division

English, Language, and Social Sciences Department

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		
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 EI	LECTIVES: 3 credit hours minimum			
WDD121	Internet Design & Development^	3	IDS102 or Proficiency	
AOT235	Legal Research and Writing	3		
IMT121	Interactive Media	3		
IMT122	Graphic Arts Design	3	ITD100 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	
COM122	Interpersonal Communication	3		
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG231	College Composition II	3	ENG124	
MTH118	Quantitative Reasoning^	3		
or	or	or	Check for prerequisites	
MTH124	Statistics <sup>^</sup> Ω	3		
	Select one (1) Arts and Humanities Elective from the list below <sup>2</sup>	3	Check for prerequisites	
	Select two (2) Social & Behavioral Sciences Electives from the list below <sup>3</sup>	6	Check for prerequisites	
	Select two (2) Natural Science Electives from the list below ⁴▲	6-8	Check for prerequisites	
	Select one (1) English Composition & Oral Communication Elective from the list below <sup>5</sup>	3	Check for prerequisites	
	Total	31-33		
	TOTAL CREDIT HOURS	61-63		

<sup>^</sup>Based upon SSC placement scores.

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

<sup>▲</sup> 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.

 $<sup>\</sup>Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

<sup>&</sup>lt;sup>2</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>3</sup> Social & Behavioral Sciences Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY123, PSY221, SOC121, SOC123

<sup>&</sup>lt;sup>4</sup> Natural Science Electives: BIO101, BIO121, BIO126, BIO127, BIO128, BIO129, BIO130, CHM101, PHY101

<sup>&</sup>lt;sup>5</sup> English Composition and Oral Communication Electives: COM121, COM123, COM125

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

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#### 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.

<u>First Semester</u>		Credit Hours	Pre- and Co-Requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition <sup>^</sup>	3	Co-ENG024 or Co-ENG011 or Proficiency
COM122	Interpersonal Communication	3	
English Composition	on and Oral Communication Elective <sup>5</sup>	3	Check for prerequisites
MTH118	Quantitative Reasoning^	3	
or	or	or	Check for prerequisites
MTH124	Statistics <sup>^</sup> Ω	3	
ITD122	Computer Applications for Professionals^	3 16	ITD100 or Proficiency
~		16	
Second Semester		2	F316104
ENG231	College Composition II	3	ENG124
Natural Science Ele		3-4	Check for prerequisites
COM223	Interviewing I▲-	3	T3.7.0.4.4.4
ENG221	Technical Report Writing	3	ENG124
ENG227	Writing for Media	3	ENG124
		15-16	
Third Semester			
ENG125	Technical Editing and Layout ▲+	3	ENG124
ENG126	Technical Grammar and Style ▲+	3	ENG124
	al Sciences Elective <sup>3</sup>	3	Check for prerequisites
Natural Science Ele		3-4	Check for prerequisites
Arts and Humanitie	es Elective <sup>2</sup>	<u>3</u>	Check for prerequisites
		15-16	
Fourth Semester			T3.7.0.4.4.4
ENG228	Writing for the Web▲-	3	ENG124
ENG229	Grant Writing	3	ENG124
ENG250	Technical Communications Internship	3	Completed final semester
	al Sciences Elective <sup>3</sup>	3	Check for prerequisites
Technical Elective	I	<u>3</u>	Check for prerequisites
		15	
	TOTAL CREDITS	61-63	

<sup>^</sup>Based upon SSC placement scores.

 $\Omega$  MTH124 should only be taken by students planning to transfer to a four-year institution.

Students completing this degree may be eligible to also receive a Grant Writing Career Enhancement Certificate (1203).

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

<sup>▲</sup> 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.

<sup>&</sup>lt;sup>1</sup> <u>Technical Electives</u>: AOT235, IMT121, IMT122, WDD121

<sup>&</sup>lt;sup>2</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>3</sup> Social & Behavioral Sciences Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY123, PSY221, SOC121, SOC123

<sup>&</sup>lt;sup>4</sup> Natural Sciences Electives: BIO101, BIO121, BIO126, BIO127, BIO128, BIO129, BIO130, CHM101, PHY101

<sup>&</sup>lt;sup>5</sup> English Composition and Oral Communication Electives: COM121, COM123, COM125

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



# ASSOCIATE OF ARTS ASSOCIATE OF ARTS - GENERAL

**2024-25 Catalog** 

Effective Summer 2024

7100

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Arts and Sciences Division

English, Language, and Social Sciences Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year	
FRESHMAN EXPERIENCE					
SSC101	Student Success Seminar^^	1	Take first semester		
COMPUTER APPLICATIONS					
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency		
ENGLISH COMPOSITION AND ORAL	COMMUNICATION: 6 credit hours min	imum			
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-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			
SOCIAL AND BEHAVIORAL SCIENCE	S: 12 credit hours minimum (across two di	isciplines)			
BUS122	Basic Economics^	3	IDS102 or Proficiency		
BUS221	Microeconomics^	3	IDS102 or Proficiency		
BUS222	Macroeconomics^	3	IDS102 or Proficiency		
PSC121	U.S. Government and Politics	3			
PSY121	General Psychology^	3	IDS102 or Proficiency		
PSY123	Human Growth and Development	3	PSY121		
PSY124	Industrial/Organizational Psychology	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			
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency		

See footnotes on last page.

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## **ASSOCIATE OF ARTS - GENERAL**

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Course Number	Course Title Credits Pre- and Co-Requisites		Pre- and Co-Requisites	Completed Sem./Year
ARTS AND HUMANITI	ES: 9 credit hours minimum (across two disciplines)	<u>'</u>		
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG235	Introduction to Shakespeare ▲+	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
ENG239	Film Appreciation ▲+	3	ENG124	
ENG240	Women's Literature ▲-	3	ENG124	
ENG241	Major Modern Writers ▲+	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		
PHL122	Ethics	3		
NATURAL SCIENCES:	6 credit hours minimum (1 lab course required)			
BIO101	Introduction to Anatomy and Physiology^▲	3	IDS102 or Proficiency	
BIO121	Anatomy and Physiology I (lab) <sup>∧</sup> ▲	4	BIO101 or Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123	
BIO126	Science, Energy, and the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab) ▲+	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab) A-	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
BIO241	General Genetics (lab)	4	BIO141	
BIO242	Cell & Molecular Biology (lab) ▲+	4	BIO141	
CHM100	Exploring Science and Technology (lab)	4		
CHM101	Introduction to Chemistry^ ▲	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107 or Proficiency	
CHM105	Introduction to Forensic Science (lab)	3		
CHM123	General, Organic, and Biological Chemistry (lab)	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 or (CHM101 or Proficiency)	
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab)	5	CHM141	
CHM205	Forensic Chemistry (lab)	4	CHM123 or CHM141 or CHM105	
CHM241	Organic Chemistry I (lab) ▲-	5	CHM142	
CHM242	Organic Chemistry II (lab) ▲+	5	CHM241	
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	

See footnotes on last page

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PHY121	College Physics I with Algebra (lab)	4	MTH135 <b>or</b> (MTH125 and MTH130)	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY105	Astronomy (lab)	4		
PHY221	General Physics I with Calculus (lab) ▲-	5	MTH223 and Co-MTH224	
PHY222	General Physics II with Calculus (lab) ▲+	5	PHY221 <b>and</b> MTH224 <b>and</b> Co-MTH225	
Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
MATHEMATICS, STAT	TISTICS, AND LOGIC: 3 credit hours minimum			
MTH118	Quantitative Reasoning	3	MTH022 or Pre-Co-MTH018 or Proficiency	
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency	
MTH125	College Algebra^	4	MTH023 or Pre-Co-MTH025 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	MTH025 or Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH 135 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 ELECTIV	ADDITIONAL ELECTIVES TO COMPLETE DEGREE		Check for prerequisites	
	TOTAL CREDIT HOURS (60 hour minimum)	60-65		

See footnotes on last page

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## **ASSOCIATE OF ARTS - GENERAL**

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## ASSOCIATE OF ARTS GENERAL ELECTIVES

The Associate of Arts 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 20-25 elective credit hours from the previous pages or the list below to reach a minimum of 60 credit hours. Please note, courses on the previous pages are OT36 and/or TAG with the exception of SSC101 and IDS122; the listing on this page may contain OT36 or TAG courses. Please see your academic advisor for assistance with course selection.

	TRANSFERRED ASSURANCE GUARANTEED (TAG) COURSES					
Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
ASL122	American Sign Language I	4				
ASL124	American Sign Language II	4	ASL122 or Proficiency			
ASL221	American Sign Language III	4	ASL124			
BIO124	Human Diseases	3	BIO122 or BIO123			
BIO125	Medical Terminology	3				
CJS121	Introduction to Criminal Justice	3				
CJS129	Corrections	3				
CJS221	Criminology	3	CJS121			
COM123	Small Group Communication	3	IDS102 or Proficiency			
COM125	Introduction to Communication Theory^▲-	3	IDS102 or Proficiency			
COM126	Introduction to Mass Communication ▲+	3				
FIN110	Personal Finance	2				
PSC221	State and Local Government	3	IDS102 or Proficiency			
PSY131	Psychology of Personality	3	PSY121			
SOC221	Social Problems	3	SOC121			
SPN100	Elementary Spanish I	4				
SPN200	Elementary Spanish II▲+	4	SPN100 or Proficiency			

ADDITIONAL COURSES					
Arts and Humanities	English				
ASL121 Introduction to the Deaf Culture and Community (3)	ENG125 Technical Editing and Layout (3)▲+				
	ENG126 Technical Grammar and Style (3)▲+				
	ENG238 Introduction to Creative Writing (3) ▲+				
English Composition and Oral Communication					
COM223 Interviewing (3)▲-					
Social and Behavioral Sciences					
GER121 Introduction to Gerontology (3)					
GER122 Psychosocial Aspects of Aging (3)					
PSC122 Introduction to Law and the Legal System (3)					
PSC222 Public Policy (3)					
PSY222 Psychological Aspects of Therapy (3)	Biology				
SOC222 Juvenile Delinquency (3)	BIO123 Principles of Human Structure & Function (5)#				
Experiential Learning	BIO222 Pharmacology (3)				
SSC201 Study Away: Experiential Learning (1)					

See footnotes on last page.

## **ASSOCIATE OF ARTS - GENERAL**

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## 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 Transferology at http://www.transferology.com to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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.

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
ENG124	College Composition (Required)	3	Co-ENG024 or Co-ENG011 or Proficiency
Arts and Humanitie.	s Elective <sup>1</sup>	3	Check for prerequisites
Social and Behavior	ral Science Elective^ 5	$\frac{3}{13}$	Check for prerequisites
		13	
Second Semester			
Arts and Humanitie.		3	Check for prerequisites
	cs, and Logic Elective <sup>2</sup>	3-5	Check for prerequisites
Natural Science Ele		3-5	Check for prerequisites
English Composition	n and Oral Communication Elective <sup>4</sup>	<u>3</u>	Check for prerequisites
		12-16	
Third Semester			
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency
Natural Science Ele	ctive <sup>▲</sup> <sup>3</sup>	4-5	Check for prerequisites
Arts and Humanitie.	s Elective <sup>1</sup>	3	Check for prerequisites
Social and Behavior	ral Science Elective^ 5	3	Check for prerequisites
Social and Behavior	ral Science Elective^5	<u>3</u>	Check for prerequisites
		16-17	
Fourth Semester			
Elective <sup>6</sup> (Take an a	dditional 14-20 credit hours to reach 60 credit hours)	14-25	Check for prerequisites
	TOTAL CREDITS	60-65	

<sup>^</sup>Based on SSC placement scores.

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

A 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.

Arts and Humanities Electives: ENG233, ENG234, ENG235, ENG236, ENG237, ENG239, ENG240, ENG241, HIS121, HIS122, HIS221, HIS222, PHL122

Mathematics, Statistics, and Logic Electives: MTH118, MTH124, MTH125, MTH130, MTH135, MTH224, MTH224, MTH225, MTH226, MTH227

Natural Science Electives: BIO101, BIO121, BIO122, BIO124, BIO124, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, BIO221, BIO241, BIO242, CHM100, CHM101, CHM101, CHM103, CHM141, CHM142, CHM142, CHM142, CHM104, CHM

CHM205, CHM241, CHM242, PHY101, PHY105, PHY121, PHY122, PHY221, PHY222

Leglish Composition and Oral Communication Electives: COM121, COM122, COM123, COM125, COM126, ENG221, ENG230, ENG231

Social and Behavioral Science Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY123, PSY124, PSY220, PSY221, SOC121, SOC122, SOC123 6 Electives: ASL121, ASL122, ASL124, ASL221, BIO123, BIO222, CJS121, CJS129, CJS221, COM223, ENG125, ENG126, ENG227, ENG228, ENG229, ENG232, ENG238, GER121, GER122, PSC122, PSC221,

PSC222, PSY131, PSY222, SOC222, SPN100, SPN200, SSC201 or any additional English Composition and Oral Communication, Social and Behavioral Science, Arts and Humanities, or Science courses.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability



## ASSOCIATE OF ARTS

## **ENGLISH**

**2024-25 Catalog** 

Effective Summer 2024

7202

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Arts and Sciences Division

English, Language, and Social Sciences Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EX	PERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
COMPUTER AF	PPLICATIONS			
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENGLISH COM	POSITION: 6 credit hours required			
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG231	College Composition II (required)	3	ENG124	
	REE ELECTIVES: 21 credit hours required for E	English Major	rs. Choose any courses from th	e following three
concentration are				
<u>COMPOSITION</u>		2	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	
ENG238	Introduction to Creative Writing ▲+	3	ENG124	
	<u>LECTIVES</u> : No duplications between this categor			
ENG233	British Literature: Medieval to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG235	Introduction to Shakespeare ▲+	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
ENG239	Film Appreciation ▲+	3	ENG124	
ENG240	Women's Literature ▲-	3	ENG124	
ENG241	Major Modern Writers▲+	3	ENG124	
	OMMUNICATIONS ELECTIVES:		T	
ENG125	Technical Editing and Layout▲+	3	ENG124	
ENG126	Technical Grammar and Style ▲+	3	ENG124	
ENG250	Technical Communications Internship	3	Completed final semester	
COM121	Effective Speaking	3		
	GUAGE ELECTIVES: 8 credit hours from the ca	T -	T	
SPN100	Elementary Spanish I	4		
SPN200	Elementary Spanish II ▲+	4	SPN100 or Proficiency	
ASL122	American Sign Language I	4		
ASL124	American Sign Language II	4	ASL122 or Proficiency	
ASL221	American Sign Language III	4	ASL124	

<sup>^</sup>Based on SSC placement scores

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

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SOCIAL AND B	EHAVIORAL SCIENCES: 6 credit hours minin	num across tw	vo disciplines	
PSC121	U.S. Government and Politics	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
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	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency	
	MANITIES: 6 credit hours minimum across two d	lisciplines.		
	between this category and the Literature category.			
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 17 <sup>th</sup> Century	3		
HIS222	World Civilization from 17 <sup>th</sup> Century	3		
	ENCES: 7 semester credit hours required. Choose	one 3-hour o	course and one 4-hour course.	
(1 lab course is re BIO101		3	IDS102 or Proficiency	
BIO101	Intro to Anatomy and Physiology^▲ Anatomy and Physiology I (lab)^▲	4	BIO101 or Proficiency	
BIO121	Science, Energy, and the Environment (lab)	4	BIOTOT OF FTORCIERCY	
BIO126 BIO127	Human Biology (lab)	4		
	33 1 1	3		
BIO128 BIO129	Climate Studies (lab) +	3		
	Meteorology (lab)			
BIO130 BIO141	Ocean Studies (lab)▲- General Biology I (lab)	3 4		
BIO142	General Biology II (lab)	4		
CHM100	Exploring Science and Technology (lab)	4	(MTH093 or MTH025 or	
CHM101	Introduction to Chemistry^▲	4	Proficiency) or MTH105 or MTH106 or MTH107	
CHM105	Introduction to Forensic Science (lab)	3		
GEO141	Physical Geology (lab)	4		

See next page for footnotes.

<b>2024-25 Catalog</b>	ENGLISH	7202
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Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year			
	NATURAL SCIENCES, continued: 7 semester credit hours required. Choose one 3-hour course and one 4-hour course.						
One lab course is req	uired.						
PHY101	Principles of Physics (lab)^	4	[(MTH093 or MTH025 or Proficiency) or MTH105 or MTH106 or MTH107 or MTH108] and (IDS102 or Proficiency)				
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency				
PHY105	Astronomy (lab)	4					
MATHEMATICS, S	TATISTICS, AND LOGIC: 3 semester credit ho	urs requir	ed				
MTH118	Quantitative Reasoning	3	MTH022 or Pre-Co-MTH018 or Proficiency				
MTH124	Statistics^	3	MTH093 or Pre-Co-MTH024 or Proficiency				
MTH125	College Algebra^	4	MTH094 or Pre-Co-MTH025 or Proficiency				
	TOTAL CREDIT HOURS	61-64					

<sup>^</sup>Based on SSC placement scores.

Students completing this degree may be eligible to also receive a Grant Writing Career Enhancement Certificate (1203) and Professional Writing Career Enhancement Certificate (1201).

ABecause 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.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

Effective Summer 2024

#### 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. The Associate of Arts in English Degree requires a minimum of 60 credit hours. Students should choose elective courses from the first 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.

#### 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.

#### 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 <a href="http://www.transfer.org/uselect">http://www.transfer.org/uselect</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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.

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition <sup>^</sup> (required)	3	Co-ENG024 or Co-ENG011
			or Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
	tics, and Logic Elective <sup>1</sup>	3	Check for prerequisites
Arts and Humanitie	s Elective <sup>2</sup>	3	Check for prerequisites
Social and Behavior	ral Science Elective <sup>3</sup>	$\frac{3}{16}$	Check for prerequisites
		16	
Second Semester			
ENG231	College Composition II (required)	3	ENG124
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency
Natural Science Ele		3-4	Check for prerequisites
Arts and Humanitie	s Elective <sup>2</sup>	3	Check for prerequisites
English Elective <sup>5</sup>		<u>3</u>	Check for prerequisites
		15-16	
Third Semester			
Foreign Language I		4	Check for prerequisites
Natural Science Ele		3	Check for prerequisites
	ral Science Elective <sup>3</sup>	3	Check for prerequisites
English Elective 5		3	Check for prerequisites
English Elective <sup>5</sup>		<u>3</u>	Check for prerequisites
F 4.6		16	
Fourth Semester		2	
English Elective 5	E1 .: 6	3	Check for prerequisites
Foreign Language I	Elective °	4	Check for prerequisites
English Elective 5		3	Check for prerequisites
English Elective 5		3	Check for prerequisites
English Elective <sup>5</sup>		<u>3</u>	Check for prerequisites
	TOTAL OPEDITO	16	
	TOTAL CREDITS	61-64	

<sup>^</sup> Based on SSC placement scores.

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

A 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.

<sup>&</sup>lt;sup>1</sup> Mathematics, Statistics, and Logic Electives: MTH118, MTH124, MTH125

<sup>2</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222, PHL122

<sup>&</sup>lt;sup>3</sup> Social and Behavioral Science Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY123, PSY124, PSY221, SOC121, SOC122, SOC123

<sup>&</sup>lt;sup>4</sup> Natural Science Electives: BIO101, BIO121, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, CHM100, CHM101, CHM105, GEO141, PHY101, PHY105, PHY121

<sup>&</sup>lt;sup>5</sup> English Electives: COM121, ENG125, ENG126, ENG221, ENG227, ENG228, ENG229, ENG230, ENG232, ENG233, ENG234, ENG235, ENG236, ENG237, ENG238, ENG239, ENG240, ENG241, ENG250

<sup>&</sup>lt;sup>6</sup> Foreign Language Electives: SPN100, SPN200, ASL122, ASL124, ASL221

## ASSOCIATE OF ARTS

## **PSYCHOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

**7210** 

Arts and Sciences Division

English, Language, and Social Sciences Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EX	PERIENCE	•		
SSC101	Student Success Seminar^^	1	Take first semester	
COMPUTER AP	PLICATIONS	•		
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
	POSITION AND ORAL COMMUNICATION	N: 9 credit hou		
ENG124	College Composition <sup>^</sup> (required)	3	Co-ENG024 or Co-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		
SOCIAL AND BE	EHAVIORAL SCIENCES: 27 credit hours red	quired		
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY123	Human Growth and Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY131	Psychology of Personality	3	PSY121	
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	
SOC225	Diversity in American Society	3	IDS102 or Proficiency	
FOREIGN LANC	GUAGE: 8 credit hours minimum	•	·	
ASL122	American Sign Language I	4		
ASL124	American Sign Language II	4	ASL122 or Proficiency	
ASL221	American Sign Language III	4	ASL124	
SPN100	Elementary Spanish I	4		
SPN200	Elementary Spanish II ▲+	4	SPN100 or Proficiency	
ARTS AND HUMA	NITIES: 6 credit hours minimum	•	J	
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		
HIS221	World Civilization to 17 <sup>th</sup> Century	3		
HIS222	World Civilization from 17 <sup>th</sup> Century	3		

<sup>^</sup>Based on SSC placement scores. ^^To promote student success, this course should be taken in the first semester.

<b>2024-25 Catalog</b>
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## **PSYCHOLOGY**

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Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NATURAL 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	
BIO126	Science, Energy, and the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab) ▲+	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab) A-	3		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
CHM100	Exploring Science and Technology (lab)	4		
CHM101	Introduction to Chemistry^ ▲	4	(MTH093 or MTH025 or Proficiency) or MTH105 or MTH106 or MTH107	
CHM105	Introduction to Forensic Science (lab)	3		
CHM123	General, Organic, and Biological Chemistry (lab)	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 or (CHM101 or Proficiency)	
CHM205	Forensic Chemistry (lab)	4	CHM123 or CHM141 or CHM105	
GEO141	Physical Geology (lab)	4		
PHY101	Principles of Physics (lab)^	4	[(MTH093 or MTH025 or Proficiency) or MTH105 or MTH106 or MTH107 or MTH108] and (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
PHY105	Astronomy (lab)	4		
MATHEMATICS.	STATISTICS, AND LOGIC: 3 semester credit	hours reaui	red	
MTH124	Statistics^	3	MTH093 or Pre-Co-MTH024 or Proficiency	
ELECTIVE			•	
SSC201	Study Away: Experiential Learning	1	Permission of Instructor	
TOTAL CREDITS	SHOURS	63-65		

<sup>^</sup>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.

^Fall only courses. Please see your academic advisor for availability.

↑+Spring only courses. 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.

<u>First Semester</u>		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
ENG124	College Composition <sup>(required)</sup>	3	Co-ENG024 or Co-ENG011 or Proficiency
PHL122	Ethics (required)	3	
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency
Foreign Language	Elective <sup>4</sup>	<u>4</u>	Check for prerequisites
		17	
Second Semester			
PSY123	Human Growth and Development	3	PSY121
PSY124	Industrial/Organizational Psychology	3	
PSY131	Psychology of Personality	3	PSY121
MTH124	Statistics <sup>^</sup>	3	MTH093 or Pre-Co-MTH024 or
		-	Proficiency
Foreign Language	Elective 4	<u>4</u>	Check for prerequisites
1 1 1 9 1 1 1 9 1 1 9 1		<del>-</del> 16	I I I I I I I I I I I I I I I I I I I
Third Semester			
	on and Oral Communication Elective <sup>3</sup>	3	Check for prerequisites
Natural Science El		3-4	Check for prerequisites
PSY220	Social Psychology	3	PSY121
PSY221	Abnormal Psychology	3	PSY121
PSY222	Psychological Aspects of Therapy^	<u>3</u>	IDS102 or Proficiency
12122	r sy enero great ruspeets or rustapy	15 <del>-</del> 16	12 2 10 2 01 1 1 0 11 0 10 10 10
Fourth Semester		10 10	
Natural Science El	ective <b>\</b> ²	3-4	Check for prerequisites
	on and Oral Communication Elective <sup>3</sup>	3	Check for prerequisites
Arts and Humanitie		3	Check for prerequisites
PSY229	Psychological Methods	3	PSY123 and PSY220 and PSY221
15122)	1 Sychological Methods	J	and PSY222
Elective <sup>5</sup>		1	anu 1 5 1 222
SOC225	Diversity in American Society	$\frac{1}{3}$	IDS102 or Proficiency
500225	Diversity in American Society	16-17	1D5102 of 110Helency
	TOTAL CREDITS	63-65	
	TOTAL CREDITS	03-03	

<sup>^</sup>Based on SSC placement scores.

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

<sup>▲</sup> 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.

<sup>&</sup>lt;sup>1</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222

<sup>&</sup>lt;sup>2</sup> Natural Science Electives: BIO121, BIO122, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, BIO221, CHM100, CHM101, CHM105, CHM123, CHM205, GEO141, PHY101, PHY105, PHY121

<sup>&</sup>lt;sup>3</sup> English Composition and Oral Communication Electives: COM121, COM122, ENG221, ENG230, ENG231

<sup>&</sup>lt;sup>4</sup> Foreign Language Elective: ASL121, ASL122, ASL221, SPN100, SPN200

<sup>&</sup>lt;sup>5</sup> Elective: SSC201



## ASSOCIATE OF ARTS APPLIED SOCIOLOGY

**2024-25 Catalog** 

Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Arts and Sciences Division

English, Language, and Social Sciences Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EX	PERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
COMPUTER AP	PLICATIONS			
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENGLISH COM	POSITION AND ORAL COMMUNICATION	: 9 credit h	ours minimum	
ENG124	College Composition (required)^	3	Co-ENG024 or Co-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		
SOCIAL AND BI	EHAVIORAL SCIENCES: 24 credit hours red	guired		
PSY121	General Psychology^	3	IDS102 or Proficiency	
SOC121	Sociology <sup>^</sup>	3	IDS102 or Proficiency	
SOC123	Dynamics of the Family	3	Ţ	
SOC221	Social Problems	3	SOC121	
SOC225	Diversity in American Society	3	IDS102 or Proficiency	
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 SOC228 and SOC229 and MTH124	
FOREIGN LANC	GUAGE: 8 credit hours minimum			
ASL122	American Sign Language I	4		
ASL124	American Sign Language II	4	ASL122 or Proficiency	
ASL221	American Sign Language III	4	ASL124	
SPN100	Elementary Spanish I	4		
SPN200	Elementary Spanish II ▲+	4	SPN100 or Proficiency	
ELECTIVES: 3 c	redit hours minimum			
CJS121	Introduction to Criminal Justice	3		
CJS221	Criminology	3	CJS121	
COM225	Sex, Gender and Culture▲+	3		
GER121	Introduction to Gerontology	3		
GER122	Psychosocial Aspects of Aging	3		

<sup>^</sup>Based on SSC placement scores.

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

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

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Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
PSC122	Introduction to Law and the Legal System^	3	IDS102 or Proficiency	
PSC121	U.S. Government and Politics	3		
PSC221	State and Local Government	3	IDS102 or Proficiency	
PSC222	Public Policy	3	GLS121 and PSC121	
PSY123	Human Growth and Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY221	Abnormal Psychology	3	PSY121	
SOC122	Society and Technology	3		
SOC222	Juvenile Delinquency	3	SOC121	
ARTS AND HUM	IANITIES: 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		
HIS221	World Civilization to 17 <sup>th</sup> Century	3		
HIS222	World Civilization from 17 <sup>th</sup> Century	3		
NATURAL SCIE	NCES: 6 semester credit hours minimum (1 lab	b course req	uired)	
BIO121	Anatomy and Physiology I (lab)^▲	4	BIO101 or Proficiency	
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123	
BIO126	Science, Energy and the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO128	Climate Studies (lab) ▲+	3		
BIO129	Meteorology (lab)	3		
BIO130	Ocean Studies (lab) A-	3		
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
CHM100	Exploring Science and Technology (lab)	4		
CHM101	Introduction to Chemistry^▲	4	(MTH093 or MTH025 or Proficiency) or MTH105 or MTH106 or MTH107	
CHM105	Introduction to Forensic Science (lab)	3		
CHM123	General, Organic, and Biological Chemistry (lab)	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 or (CHM101 or Proficiency)	
CHM205	Forensic Chemistry (lab)	4	CHM123 or CHM141 or CHM105	
GEO141	Physical Geology (lab)	4		

See next page for footnotes.

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PHY101	Principles of Physics (lab)^	4	[(MTH093 or MTH025 or Proficiency) or MTH105 or MTH106 or MTH107 or MTH108] and (IDS102 or
PHY121	College Physics I with Algebra (lab)	4	Proficiency) MTH135 or (MTH125 and MTH130)
PHY105	Astronomy (lab)	4	
MATHEMATIC	S, STATISTICS, AND LOGIC: 3 semester cred	it hours req	quired
MTH124	Statistics^	3	MTH093 or Pre-Co-MTH024 or Proficiency
	TOTAL CREDITS HOURS	63-65	

<sup>^</sup>Based on SSC placement scores.

ABecause 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.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

Effective Summer 2024

### 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.

First Semester	r	Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ITD122	Computer Applications For Professionals^	3	ITD100 or Proficiency
ENG124	College Composition <sup>(required)</sup>	3	Co-ENG024 or Co-ENG011 or Proficiency
MTH124	Statistics^	3	MTH093 <b>or</b> Pre-Co-MTH024 <b>or</b> Proficiency
SOC121	Sociology^	3	IDS102 or Proficiency
PSY121	General Psychology^	<u>3</u>	IDS102 or Proficiency
		16	
Second Seme			
SOC123	Dynamics of the Family	3	
SOC221	Social Problems	3	SOC121
SOC225	Diversity in American Society	3	IDS102 or Proficiency
	position and Oral Communication Elective <sup>3</sup>	3	Check for prerequisites
Foreign Lang	uage Elective <sup>5</sup>	<u>4</u> 16	Check for prerequisites
		16	
Third Semeste			
	ce Elective ♣²	3-4	Check for prerequisites
	position and Oral Communication Elective <sup>3</sup>	3	Check for prerequisites
	uage Elective <sup>5</sup>	4	Check for prerequisites
SOC229		3	SOC121
SOC228	Social Structure and the Individual ▲-	<u>3</u>	SOC121
		16-17	
Fourth Semes			
	nanities Elective <sup>1</sup>	3-4	Check for prerequisites
	ce Elective ♣²	3-4	Check for prerequisites
Elective <sup>4</sup>		3	Check for prerequisites
PHL122	Ethics (required)	3	
SOC230	Applied Sociological Methods	<u>3</u>	SOC123 and SOC221 and SOC225 and SOC228 and SOC229 and MTH124
		15-17	
	TOTAL CREDITS	63-65	

<sup>^</sup>Based on SSC placement scores.

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

<sup>▲</sup> 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.

<sup>&</sup>lt;sup>1</sup>Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222

<sup>&</sup>lt;sup>2</sup>Natural Sciences Electives: BIO121, BIO122, BIO126, BIO127, BIO128, BIO129, BIO130, BIO221, CHM100, CHM101, CHM105, CHM103, CHM205, GEO141, PHY101, PHY105, PHY121

<sup>&</sup>lt;sup>3</sup>English Composition and Oral Communication Electives: COM121, COM122, ENG221, ENG230, ENG231

<sup>4</sup>Electives: CJS121, CJS221, COM225, GER121, GER122, PSC121, PSC122, PSC221, PSC222, PSY123, PSY124, PSY221, SOC122, SOC222

<sup>&</sup>lt;sup>5</sup>Foreign Language Electives: ASL122, ASL124, ASL221, SPN100, SPN200

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



## ASSOCIATE OF ARTS

## COMMUNICATION

**2024-25 Catalog**Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Arts and Sciences Division

Communication, Humanities, Reading, Education, and American Sign Language Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXI	PERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
CORE COMMUN	NICATION PROGRAM COURSES: 15 credit hours	s required		
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
COM123	Small Group Communication^	3	IDS102 or Proficiency	
COM125	Introduction to Communication Theory^	3	IDS102 or Proficiency	
COM126	Introduction to Mass Communication ▲+	3		
COMMUNICATI	ON AND LANGUAGE ELECTIVES: 11 credit hou	ırs minimum		
COM223	Interviewing I ▲ - (recommended)	3		
COM225	Sex, Gender, and Culture ▲+ (recommended)	3		
COM227	Intercultural Communication ▲ - (recommended)	3		
COM228	Nonverbal Communication ▲ - (recommended)	3		
COM229	Persuasion^▲+ (recommended)	3		
ASL122	American Sign Language	4		
ASL124	American Sign Language II	4	ASL122 or Proficiency	
ASL221	American Sign Language III	4	ASL124	
SPN100	Elementary Spanish I	4		
SPN200	Elementary Spanish II▲+	4	SPN100 or Proficiency	
ENGLISH COMP	POSITION: 9 credit hours minimum			
ENG124	College Composition^ (required)	3	Co-ENG024 or Co- ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG230	Business Communication	3	ENG124	
ENG231	College Composition II	3	ENG124	

<sup>^</sup>Based on SSC placement scores.

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

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SOCIAL AND BEHAV	VIORAL SCIENCES: 9 credit hours minimum (require	d across two disciplin	es)	
BUS122	Basic Economics^	3	IDS102 or Proficiency	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
PSC121	U.S. Government and Politics	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY123	Human Growth and Development	3	PSY121	
PSY124	Industrial / Organizational Psychology	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		
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency	
ARTS AND HUMANI	TIES: 6 credit hours minimum (required across two disc	iplines)		
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		
PHL122	Ethics	3		
NATURAL SCIENCE	S: 6 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	
BIO126	Science, Energy, and 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 BIO127 or BIO141	

<sup>\*</sup>Based on SSC placement scores.

A 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.

A -Fall only courses. Please see your academic advisor for availability.

A +Spring only courses. Please see your academic advisor for availability.

## **COMMUNICATION**

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Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NATURAL SCIEN	ICES, continued: 6 credit hours minimum (1 lab co	ourse requi	ired)	
CHM100	Exploring Science and Technology (lab)	4		
CHM101	Introduction to Chemistry^▲	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107 or Proficiency	
CHM105	Introduction to Forensic Science (lab)	3		
CHM123	General, Organic, and Biological Chemistry (lab)	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 or (CHM101 or Proficiency)	
CHM205	Forensic Chemistry (lab)	4	CHM123 or CHM141 or CHM105	
GEO141	Physical Geology (lab)	4		
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 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	
PHY105	Astronomy (lab)	4		
MATHEMATICS	, STATISTICS, AND LOGIC * 3 credit hours mi	nimum		
MTH118	Quantitative Reasoning	3	Pre-Co-MTH018 or MTH022 or Proficiency	
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency	
MTH125	College Algebra^	4	(MTH094 or MTH025 or MTH123 or Proficiency)	
	TOTAL CREDIT HOURS	60-64		

<sup>^</sup>Based on SSC placement scores.

ABecause 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.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

<sup>\*</sup>Check with the transfer institution to which you would like to apply and consult your academic advisor at the transfer institute to determine what electives to take.

Effective Summer 2024

#### 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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.

First Semester		Credit Hours	Pre-or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ENG124	College Composition I^ (required)	3	Co-ENG024 or Co-ENG011 or Proficiency
COM121	Effective Speaking (required)	3	
COM122	Interpersonal Communication (required)	3	
Natural Science Elec	tive <sup>2</sup> ▲	3-4	Check for prerequisites
Social and Behavior	al Science Elective <sup>1</sup>	<u>3</u>	Check for prerequisites
		16-17	
Second Semester			
COM123	Small Group Communication <sup>^</sup> (required)	3	IDS102 or Proficiency
COM125	Introduction to Communication Theory\(^\) (required)	3 3 3	IDS102 or Proficiency
COM126	Introduction to Mass Communication ▲+ (required)		
	cs, and Logic Elective <sup>5</sup>	3-4	Check for prerequisites
Arts and Humanities	Elective <sup>4</sup>	<u>3</u>	Check for prerequisites
		15-16	
Third Semester			
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency
English Composition		3	Check for prerequisites
Communication and		3-4	
Communication and		3-4	
Natural Science Elec	tive <sup>2</sup> A	3-4	Check for prerequisites
		15-18	
Fourth Semester			
Communication and		3-4	
Communication and		3-4	
English Composition		3	Check for prerequisites
Social and Behavior		3 <u>3</u>	Check for prerequisites
Arts and Humanities	Elective 4		Check for prerequisites
		15-17	
	TOTAL CREDITS	60-64	

<sup>^</sup>Based on SSC placement scores.

<sup>^^</sup>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.

Social and Behavioral Science Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY123, PSY124, PSY220, SOC121, SOC122, SOC123

<sup>&</sup>lt;sup>2</sup> Natural Science Electives: BIO101, BIO121, BIO122, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, BIO221, CHM100, CHM101, CHM105, CHM123, CHM205, GEO141, PHY101, PHY105, PHY121, PHY122,

<sup>&</sup>lt;sup>3</sup> English Composition Electives, ENG221, ENG230, ENG231

<sup>&</sup>lt;sup>4</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222, PHL122

<sup>&</sup>lt;sup>5</sup> Mathematics, Statistics, and Logic Electives: MTH118, MTH124, MTH125 \*Check with the transfer institution to which you would like to apply and consult your academic advisor at the transfer institute to determine what electives to take.

<sup>&</sup>lt;sup>6</sup> Communication and Language Electives: COM223, COM225, COM227, COM228, COM229, ASL122, ASL124, ASL221, SPN100, SPN200

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



## CAREER ENHANCEMENT CERTIFICATE

## **Professional Writing**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13.28

2024-25 Catalog
Effective Summer 2024

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Arts and Sciences Division

English, Language, and Social Sciences Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG125	Technical Editing and Layout ▲+	3	ENG124	
ENG230	Business Communication	3	ENG124	
WRITING ELECTIV	<b>ES</b> : 9 of the following credit hours required			
ENG126	Technical Grammar and Style ▲+	3	ENG124	
ENG221	Technical Report Writing	3	ENG124	
ENG227	Writing for Media	3	ENG124	
ENG228	Writing for the Web	3	ENG124	
ENG232	Scriptwriting 4+	3	ENG124	
ENG238	Introduction to Creative Writing ▲+			
	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	Co-ENG024 or Co-ENG011 or
G 1.G			Proficiency
Second Semester			
ENG125	Technical Editing and Layout ▲+	3	ENG124
ENG230	Business Communication	3	ENG124
Writing Elective		3	ENG124
Writing Elective		3	ENG124
Third Semester			
111110 5011105001			
Writing Elective		3	ENG124
	TOTAL CREDITS	18	

<sup>^</sup> Based upon SSC placement score.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



## CAREER ENHANCEMENT CERTIFICATE

**2024-25 Catalog** 

Effective Summer 2024

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## **GRANT WRITING**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-

Arts and Sciences Division

English, Language, and Social Sciences Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG231	College Composition II	3	ENG124	
ENG221	Technical Report Writing	3	ENG124	
ENG229	Grant Writing	3	ENG124	
ENG125	Technical Editing and Layout ▲+	3	ENG124	
ENG126	Technical Grammar and Style ▲+	3	ENG124	
	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^	$\frac{3}{3}$	Co-ENG024 or Co-ENG011
		3	or Proficiency
g 1g 4			
Second Semester			
ENG221	Technical Report Writing	3	ENG124
ENG231	College Composition II	3	ENG124
ENG125	Technical Editing and Layout ▲+	3	ENG124
ENG126	Technical Grammar and Style ▲+	<u>3</u>	ENG124
		9	
Third Semester			
ENG229	Grant Writing	<u>3</u>	ENG124
-	5	3	
		3	
	TOTAL CREDITS	18	

<sup>^</sup>Based upon SSC placement score.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



## career community:

mathematics and 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. 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.



## ASSOCIATE OF SCIENCE **MATHEMATICS**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

**7500** 

## Arts and Sciences Division

## Mathematics Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPE	CRIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
ENGLISH COMPO	SITION AND ORAL COMMUNICATION: 6 cre	dit hours mini	mum	
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-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	IDS102 or Proficiency	
COM125	Introduction to Communication Theory^▲-	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
SOCIAL AND BEH	AVIORAL SCIENCES: 6 credit hours minimum			
PSC121	U.S. Government and Politics	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency	
BUS122	Basic Economics^	3	IDS102 or Proficiency	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
ARTS AND HUMA	NITIES: 6 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		
HIS221	World Civilization to 17th Century	3		
HIS222	World Civilization from 17th Century	3		
PHL122	Ethics	3		
NATURAL SCIENC	CES: 7 credit hours minimum (1 lab course require	rd)		
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		

<sup>^</sup>Based upon SSC placement scores. ^^To promote student success, this course should be taken in the first semester.

A 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.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

## **MATHEMATICS**

**7500** 

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NATURAL SCIENC	CES, continued: 7 credit hours minimum (1 lab course	required)		
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
CHM101	Introduction to Chemistry^▲	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107 or Proficiency	
CHM123	General, Organic, and Biological Chemistry (lab)	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 or (CHM101 or Proficiency)	
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 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	
PHY105	Astronomy (lab)	4		
PHY221	General Physics I with Calculus (lab) ▲-	5	MTH223 and Co-MTH224	
PHY222	General Physics II with Calculus (lab) ▲+	5	PHY221 and MTH224 and Co-MTH225	
MATHEMATICS, S	STATISTICS, AND LOGIC CORE: 26 credit hours re	equired		
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
MTH214	Discrete Mathematics^	3	MTH125 or MTH135 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	4	MTH224	
MTH226	Linear Algebra ▲ -	3	MTH224	
MTH227	Ordinary Differential Equations▲+	3	MTH224	
ADDITIONAL ELE TO COMPLETE DI	CCTIVES FROM THIS SHEET EGREE <sup>5</sup>	8-9	Check for prerequisites	
	TOTAL CREDIT HOURS	61-65		

<sup>^</sup>Based upon 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.

<sup>&</sup>lt;sup>5</sup>Additional Electives: Any courses listed on this sheet not already being used to fulfill another requirement. **A**-Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
MTH135	Precalculus^- A student may take	5	MTH025 or Proficiency
	MTH125 (College Algebra) and MTH130		
	(Trigonometry) over two semesters to		
ENIC124	satisfy this requirement.	2	C FNC024 C FNC011
ENG124	College Composition <sup>^</sup> (required)	3	Co-ENG024 or Co-ENG011
Social and Behavioral S	Cajanga Flaatiya <sup>2</sup>	3	<b>or</b> Proficiency Check for prerequisite
Arts and Humanities Ele		2	Check for prerequisite  Check for prerequisite
Aris and Humanilles Lie	ective	3 15	Check for prerequisite
Coopered Compostor		13	
Second Semester MTH223	Analytic Geometry and Calculus I^	4	MTU125 on (MTU125 and MTU120)
WI I II 223	Analytic Geometry and Calculus I	4	MTH135 or (MTH125 and MTH130)
500225	D'- '4-' A ' C ' 4-	2	or Proficiency
SOC225	Diversity in American Society	3	IDS102 or Proficiency
MTHO14	(required)	2	MTH125 MTH125 D C :
MTH214	Discrete Mathematics^	3	MTH125 or MTH135 or Proficiency
Arts and Humanities Ele		3	Check for prerequisite
English Composition an	d Oral Communication Elective <sup>3</sup>	<u>3</u>	Check for prerequisite
TILL 1 G		16	
Third Semester			) (TI 1000
MTH224	Analytic Geometry and Calculus II	$\frac{4}{4}$	MTH223
		4	
Fourth Semester		_	
MTH225	Analytic Geometry and Calculus III	4	MTH224
MTH226	Linear Algebra ▲-	3	MTH224
Natural Science Elective	e <b>↓</b> 1	4-5	Check for prerequisite
Additional Elective <sup>5</sup>		<u>3</u>	Check for prerequisite
		14-15	
Fifth Semester			
MTH227	Ordinary Differential Equations ▲+	3	MTH224
Additional Elective <sup>5</sup>		3-4	Check for prerequisite
Natural Science Elective	e <b>↓</b> 1	3-5	Check for prerequisite
Additional Elective <sup>5</sup>		<u>3</u>	Check for prerequisite
		12-15	
	TOTAL CREDITS	61-65	

<sup>^</sup> Based upon SSC placement scores.

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

ABecause 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.

<sup>&</sup>lt;sup>1</sup> Natural Science Electives: BIO121, BIO122, BIO124, BIO126, BIO127, BIO129, BIO141, BIO142, BIO221, CHM101, CHM123, CHM141, CHM142, PHY101, PHY105, PHY121, PHY122, PHY221, PHY222

<sup>&</sup>lt;sup>2</sup> Social and Behavioral Science Electives: BUS122, BUS221, BUS222, PSC121, PSY121, SOC121

<sup>&</sup>lt;sup>3</sup> English Composition and Oral Communication Electives: COM121, COM122, COM123, COM125, ENG221, ENG230, ENG231

<sup>&</sup>lt;sup>4</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222, PHL122

<sup>&</sup>lt;sup>5</sup> Additional Electives: Any courses listed on this sheet not already being used to fulfill another requirement.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



#### ASSOCIATE OF SCIENCE

# **2024-25 Catalog**

Effective Summer 2024

7501

# MATHEMATICS – PRE-ACTUARIAL MATHEMATICS MAJOR

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

#### Arts and Sciences Division

#### Mathematics Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EX	PERIENCE			
SSC101	Student Success Seminar^^	1	1 Take first semester	
ENGLISH COM	POSITION AND ORAL COMMUNICATION:	6 credit hou	rs minimum	
ENG124	College Composition <sup>^</sup> (required)	3	Co-ENG024 or Co-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	IDS102 or Proficiency	
COM125	Introduction to Communication Theory^▲-	3	IDS102 or Proficiency	
COM121	Effective Speaking	3		
SOCIAL AND BI	EHAVIORAL SCIENCES: 9 credit hours requi	ired		
SOC225	Diversity in American Society	3	IDS102 or Proficiency	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
ARTS AND HUM	IANITIES: 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		
HIS221	World Civilization to 17th Century	3		
HIS222	World Civilization from 17th Century	3		
PHL122	Ethics	3		
NATURAL SCIE	NCES: 7 credit hours minimum (1 lab course r	equired)		
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, and the Environment (lab)	4		
BIO127	Human Biology (lab)	4		
BIO129	Meteorology (lab)	3		
BIO141	General Biology I (lab)	4		

<sup>^</sup>Based on SSC placement scores.

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

A 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.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

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# MATHEMATICS – PRE-ACTUARIAL MATHEMATICS MAJOR

**7501** 

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NATURAL SCIEN	NCES, continued: 7 credit hours minimum (1 lab	course req	uired)	
BIO142	General Biology II (lab)	4		
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
CHM101	Introduction to Chemistry^▲	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107 or Proficiency	
CHM123	General, Organic, and Biological Chemistry (lab)	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 or (CHM101 or Proficiency)	
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab)	5	CHM141	
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	
PHY121	College Physics I with Algebra <sup>^</sup> (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency	
PHY122	College Physics II with Algebra (lab)	4	PHY121	
PHY105	Astronomy (lab)	4		
PHY221	General Physics I with Calculus (lab) ▲-	5	MTH223 and Co-MTH224	
PHY222	General Physics II with Calculus (lab) ▲+	5	PHY221 and MTH224 and Co- MTH225	
MATHEMATICS, S	STATISTICS, AND LOGIC CORE: 32 credit hours r	equired		
BUS124	Business Analysis	3	(MTH022 or MTH023 or Proficiency) and (IDS102 or Proficiency)	
ACC132	Financial Accounting	4	Pre-Co BUS124	
AOT226	Spreadsheets Microsoft Excel^	3	ITD100 or Proficiency	
MTH124	Statistics^ (required)	3	MTH022 or Pre-Co-MTH024 or Proficiency	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
MTH214	Discrete Mathematics^	3	MTH125 or MTH135 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	4	MTH224	
MTH226	Linear Algebra ▲-	3	MTH224	
MTH227	Ordinary Differential Equations ▲+	3	MTH224	
	TOTAL CREDIT HOURS	60-65		

 $<sup>^{\</sup>wedge}$  Based upon SSC placement scores.

A 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.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

Effective Summer 2024

# MATHEMATICS – PRE-ACTUARIAL MATHEMATICS MAJOR

**7501** 

#### 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
	Precalculus^— A student may take MTH125		
MTH135	(College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy	5	MTH025 or Proficiency
	this requirement.		
ENG124	College Composition <sup>^</sup> (required)	3	Co-ENG024 or Co-ENG011 or Proficiency
BUS124	Business Analysis	3	(MTH022 or MTH023 or Proficiency) and (IDS102 or Proficiency)
BUS221	Microeconomics^	<u>3</u>	IDS102 or Proficiency
		15	
Second Semester			
MTH214	Discrete Mathematics^	3	MTH125 or MTH135 or Proficiency
MTH223	Analytic Geometry and Calculus I^	4	MTH135 or (MTH125 and MTH130) or Proficiency
ACC132	Financial Accounting	4	BUS124
BUS222	Macroeconomics^	3	IDS102 or Proficiency
Arts and Humanities	s Elective <sup>4</sup>	<u>3</u>	Check for prerequisites
		17	
Third Semester			
MTH224	Analytic Geometry and Calculus II	4	MTH223
English Composition	n and Oral Communication Elective <sup>2</sup>	3	Check for prerequisites
Natural Science Elec	ctive ♣ ¹	3-5	Check for prerequisites
Arts and Humanities	s Elective <sup>4</sup>	<u>3</u>	Check for prerequisites
		13-15	
Fourth Semester			
MTH124	Statistics (required)	3	MTH022 <b>or</b> Pre-Co-MTH024 <b>or</b> Proficiency
MTH226	Linear Algebra ▲-	3	MTH224
SOC225	Diversity in American Society	3	IDS102 or Proficiency
Mathematics, Statist	ics, and Logic Core Elective <sup>3</sup>	3-4	Check for prerequisites
Natural Sciences Ele	ective ♣ ¹	<u>3-5</u>	Check for prerequisites
		15-18	
	TOTAL CREDITS	60-65	

<sup>^</sup>Based upon SSC placement score.

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

A 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.

<sup>&</sup>lt;sup>1</sup>Natural Science Electives: BIO121, BIO122, BIO124, BIO126, BIO127, BIO129, BIO141, BIO142, BIO221, CHM101, CHM123, CHM141, CHM142, PHY101, PHY105, PHY121, PHY122, PHY221, PHY222

<sup>&</sup>lt;sup>2</sup> English Composition and Oral Communication Electives: COM121, COM122, COM123, COM125, ENG221, ENG230, ENG231

<sup>3</sup> Mathematics, Statistics and Logic Core Electives: AOT226, MTH225, MTH227

 $<sup>^4\</sup>underline{Arts\ and\ Humanities\ Electives} : ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, HIS221, HIS222, PHL122$ 

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.



## ASSOCIATE OF SCIENCE

# **CHEMISTRY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

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Arts and Sciences Division

#### Chemistry Department

			, , , , , , , , , , , , , , , , , , ,	
Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXP	ERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
CONCENTRATIO	ON CORE: 20 credit hours			
CHM141	General Chemistry I (lab)	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab)	5	CHM141	
CHM241	Organic Chemistry I (lab)▲-	5	CHM142	
CHM242	Organic Chemistry II (lab) ▲+	5	CHM241	
NATURAL SCIEN	NCES: 4 credit hour minimum			
CHM205	Forensic Chemistry (lab) (recommended for Forensic Science)	4	CHM123 or CHM141 or CHM105	
PHY121	College Physics I with Algebra (lab)^ (recommended for BA)	4	MTH135 or (MTH125 and MTH130) or Proficiency	
PHY221	General Physics I with Calculus (lab) ▲ - (recommended for BS)	5	Pre-MTH223 and Co-MTH224	
BIO141	General Biology I (lab)**	4		
MATHEMATICS.	STATISTICS AND LOGIC: 8 credit hours min	iimum		
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
MTH223	Analytic Geometry and Calculus I^	4	MTH135	
MTH224	Analytic Geometry and Calculus II	4	MTH223	
MTH225	Analytic Geometry and Calculus III*	4	MTH224	
ENGLISH COMP	OSITION AND ORAL COMMUNICATION: 3	credit hou	urs	
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-ENG011 or Proficiency	
SOCIAL AND BE	HAVIORAL SCIENCES: 6 credit hours across	two discipl	lines	
BUS122	Basic Economics^	3	IDS102 or Proficiency	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
PSC121	U.S. Government and Politics	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY124	Industrial/Organizational Psychology	3		
PSY220	Social Psychology	3		
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency	

<sup>^</sup> Based on SSC placement scores

<sup>^^</sup> To promote student success, this course should be taken in the first semester

<sup>\*</sup>Required if also taking PHY222

<sup>\*\*</sup>Required if taking BIO241

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

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ARTS AND HUM	IANITIES: 6 credit hours across two disciplines			
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	
ENG240	Women's Literature	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 17 <sup>th</sup> Century	3		
PHL122	Ethics	3		
ELECTIVES: Sel 60-65 credit hours	ect additional credits from Natural Sciences, Ma	thematics	, or the electives categories to compl	ete the total of
CHM105	Introduction to Forensic Science (lab)	3		
CHM243	Biochemistry I	3	CHM123 or CHM141	
PHY105	Astronomy (lab)	4		
PHY122	College Physics II with Algebra (lab) ▲*	4	PHY121	
PHY222	General Physics II with Calculus (lab)▲+	5	Pre-PHY222 and Co-MTH225	
GEO141	Physical Geology (lab)	4		
BIO142	General Biology II (lab)	4		
BIO241	General Genetics (lab) ▲-	4	BIO141	
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency	
MTH227	Ordinary Differential Equations	4	MTH224	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
CJS121	Introduction to Criminal Justice	3		
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
ENG221	Technical Report Writing	3	ENG124	
ENG231	College Composition II	3	ENG124	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC122	Society and Technology	3		
SCI271	Special Topics in Science I	1		
SCI272	Special Topics in Science II	2		
SCI273	Special Topics in Science III	3		
SSC201	Study Away: Experiential Learning	1		
	TOTAL CREDIT HOURS	60-65		

<sup>^</sup> Based on SSC placement scores

 $<sup>^{\</sup>wedge \wedge}$  To promote student success, this course should be taken in the first semester

<sup>\*</sup>Required if also taking PHY222

<sup>\*\*</sup>Required if taking BIO241

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

<sup>▲\*</sup>Summer only courses. 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 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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.

<u>First Semester</u> SSC101	Student Success Seminar^^	<u>Credit Hours</u> 1	Pre- and Co-requisites  Take first semester
CHM141	General Chemistry I (lab)	5	(CHM101 or Proficiency) or
CHMITTI	General Chemistry I (lab)	J	(MTH024 or MTH025 or
			Proficiency)
SOC225	Diversity in American Society	3	IDS102 or Proficiency
	(required)		
ENG124	College Composition <sup>^</sup> (required)	3	Co-ENG024 or Co-ENG011 or Proficiency
Mathematics, Statistics	and Logic Elective <sup>3</sup>	<u>4</u>	Check for prerequisite
		16	
Second Semester			
CHM142	General Chemistry II (lab)	5	CHM141
Social and Behavioral		3	Check for prerequisite
Arts and Humanities E		3	Check for prerequisite
Mathematics, Statistics	and Logic Elective <sup>3</sup>	<u>4</u>	Check for prerequisite
		15	
Third Semester			
CHM241	Organic Chemistry I (lab) ▲-	5	CHM142
Natural Science Electiv		3-5	Check for prerequisite
Arts and Humanities E	lective <sup>2</sup>	3	Check for prerequisite
Elective 3,5		3-4 14-17	Check for prerequisite
		14-17	
Fourth Semester			
CHM242	Organic Chemistry II (lab) ▲+	5	CHM241
Elective(s) $^{5,6}$		4-5	Check for prerequisite
Elective(s) 5,6		<u>6-7</u>	Check for prerequisite
		15-17	
	TOTAL CREDITS	60-65	

<sup>^</sup>Based on SSC placement scores

<sup>^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup> Social and Behavioral Science Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY124, PSY220, SOC121, SOC122

<sup>&</sup>lt;sup>2</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, ENG240, HIS121, HIS122, HIS221, HIS222, PHL122

<sup>&</sup>lt;sup>3</sup> Mathematics, Statistics and Logic Electives: MTH135, MTH223, MTH224, MTH225\*

<sup>&</sup>lt;sup>4</sup> Natural Science Electives: CHM205, PHY121, PHY221, BIO141\*\*

<sup>&</sup>lt;sup>5</sup> <u>Electives</u>: CHM105, CHM243, PHY105, PHY122, PHY222, GEO141, BIO142, BIO241, MTH124, MTH227, COM121, COM122, CJS121, CSE122, ENG221, ENG231, ITD122, SOC121, SOC122, SCI271, SCI272, SCI273, SSC201

<sup>&</sup>lt;sup>6</sup> Select additional courses to complete the total of 60-65 credit hours.

<sup>\*</sup>Required if also taking PHY222

<sup>\*\*</sup> Required if also taking BIO241

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

# Stark State COLLEGE WAP

## ASSOCIATE OF SCIENCE

# **BIOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

**2024-25 Catalog** 

Effective Summer 2024

**1270** 

#### Arts and Sciences Division

## Biology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
FRESHMAN EXPERIENCE						
SSC101	Student Success Seminar^^	1	Take first semester			
ENGLISH COME	POSITION AND ORAL COMMUNICATION: (	6 credit hou	urs			
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 AND BE	CHAVIORAL SCIENCES: 6 credit hours across	two discipli	ines			
PSY121	General Psychology^	3	IDS102 or Proficiency			
SOC121	Sociology^	3	IDS102 or Proficiency			
BUS122	Basic Economics^	3	IDS102 or Proficiency			
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency			
ARTS AND HUM	ANITIES: 6 credit hours across two disciplines					
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				
MATHEMATICS	, STATISTICS, AND LOGIC: 4 credit hours mi	nimum	1			
MTH125	College Algebra^	4	MTH023 or Pre-Co-MTH025 or Proficiency			
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency			
MTH223	Analytic Geometry and Calculus I^*	4	MTH135 or (MTH125 and MTH130) or Proficiency			

<sup>^</sup> Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>\*</sup>Required for Ohio Guaranteed Transfer Pathways in biology.

NATURAL SCIE	ENCES: 18 credit hours required			
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM141	General Chemistry I (lab)▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab)	5	CHM141	
BIOLOGY COR	E ELECTIVES: 4-8 credit hours minimum as need	ed to meet	total credit hour requirement	
BIO200	Ecology (lab)▲-	4	BIO141 or BIO142	
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
BIO241	General Genetics (lab)▲-	4	BIO141	
BIO242	Cell and Molecular Biology (lab) ▲+	4	BIO141	
CAPSTONE: Se	lect a minimum of one course from the following			
SCI271	Special Topics in Science I	1	Sophomore in program	
SCI272	Special Topics in Science II	2	Sophomore in program	
SCI273	Special Topics in Science III	3	Sophomore in program	
CONCENTRATI	ION ELECTIVES: Select additional courses to com	plete the to	otal of 60 - 63 credit hours	
CHM241	Organic Chemistry I (lab)▲-	5	CHM142	
CHM242	Organic Chemistry II (lab) ▲+	5	CHM241	
CHM243	Biochemistry I	3	CHM123 or CHM141	
CHM105	Introduction to Forensic Science (lab)	3		
CHM205	Forensic Chemistry (lab)	4	CHM123 or CHM141 or CHM105	
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 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	
	TOTAL CREDIT HOURS (60 credits minimum)	60-63		

<sup>^</sup> Based on SSC placement scores

A 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.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. 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 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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.

First Semester	ements and course transferability are controlled by the	Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BIO141	General Biology I (lab)	4	v
CHM141	General Chemistry I <sup>^</sup> (lab) ▲	5	(CHM101 or Proficiency) or
	•		(MTH024 or MTH025 or
			Proficiency)
Mathematics, Statistic	s, and Logic Elective <sup>4</sup>	<u>4-5</u>	Check for prerequisite
		14-15	
Second Semester			
BIO142	General Biology II (lab)	4	
CHM142	General Chemistry II (lab)	5	CHM141
ENG124	College Composition <sup>^</sup> (required)	3	ENG011 or Proficiency
Social and Behavioral	Science Elective <sup>2</sup>	<u>3</u> 15	Check for prerequisite
		15	
Summer	1	_	
	and Oral Communication Elective <sup>1</sup>	3	Check for prerequisite
Concentration Group	Elective <sup>o</sup>	3-5 <b>6-8</b>	Check for prerequisite
TT1 1 0		6-8	
Third Semester	5	4	
Biology Core Elective		4	Check for prerequisite
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency
Arts and Humanities E		3	Check for prerequisite
Concentration Elective	20	<u>3-5</u>	Check for prerequisite
E 4 C 4		13-15	
Fourth Semester SCI271, SCI272, or	Special Topics in Science I, II, or III	1-3	Conhamona in program
SCI271, SCI272, 01 SCI273	special Topics in Science 1, 11, of 111	1-3	Sophomore in program
Arts and Humanities E	Floative 3	3	Check for prerequisite
	<sup>5</sup> OR Mathematics, Statistics, and Logic Elective <sup>4</sup>	4	Check for prerequisite  Check for prerequisite
Concentration Elective		<u>3-5</u>	Check for prerequisite
Concentration Elective		13-15	Check for prerequisite
	TOTAL OPENIES		
A.D. 1 GGG 1	TOTAL CREDITS	60-63	

<sup>^</sup> Based on SSC placement scores

<sup>^^</sup> To promote student success, this course should be taken in the first semester

<sup>▲</sup> 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.

<sup>&</sup>lt;sup>1</sup> English Composition and Oral Communication Electives: COM121, COM122, ENG221, ENG231

<sup>&</sup>lt;sup>2</sup> Social and Behavioral Science Electives: PSY121, SOC121, BUS122

<sup>&</sup>lt;sup>3</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>4</sup> Mathematics, Statistics, and Logic Electives: MTH125 or MTH135 or MTH223

<sup>&</sup>lt;sup>5</sup> Biology Core Electives: BIO200, BIO221, BIO241, BIO242

<sup>&</sup>lt;sup>6</sup> Concentration Electives: CHM241, CHM242, CHM243, CHM105, CHM205, MTH124, PHY121 or PHY122

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

# Stark State

#### ASSOCIATE OF SCIENCE

# PRE-MEDICAL PROFESSIONAL CONCENTRATION

# (Pre-Pharmacy, Pre-Medicine, Pre-Dentistry, Pre-Veterinary)

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28

**2024-25 Catalog** 

Effective Summer 2024

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#### Arts and Sciences Division

#### Biology Department

	4ris and Sciences Division		Biology Department	
Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXP	PERIENCE			
SSC101	Student Success Seminar^^	1	Take first semester	
ENGLISH COMP	OSITION AND ORAL COMMUNICATION:	6 credit ho	urs	
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
SOCIAL AND BE	HAVIORAL SCIENCES: 6 credit hours across	s two discipi	lines	
BUS122	Basic Economics^	3	IDS102 or Proficiency	
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency	
ARTS AND HUM	ANITIES: 6 credit hours across two disciplines			
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		
MATHEMATICS	, STATISTICS, AND LOGIC: 4-5 credit hours			
MTH125	College Algebra^	4	MTH023 or Pre-Co- MTH025 or Proficiency	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement. (required)	5	MTH025 or Proficiency	
NATURAL SCIEN	NCES: 13 credit hours (1 lab course required)			
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)	4		
CHM141	General Chemistry I (lab)^▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
	GENERAL EDUCATION CREDIT TOTAL	36 - 37		

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

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

**2024-25 Catalog** 

Effective Summer 2024

# PRE-MEDICAL PROFESSIONAL CONCENTRATION (Pre-Pharmacy, Pre-Medicine, Pre-Dentistry, Pre-Veterinary)

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Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
CONCENTRATIO	CONCENTRATION CORE					
CHM142	General Chemistry II (lab)	5	CHM141			
CHM241	Organic Chemistry I (lab) ▲-	5	CHM142			
CHM242	Organic Chemistry II (lab) ▲+	5	CHM241			
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency			
CONCENTRATIO	ON ELECTIVES – Select additional courses to co	omplete the	total of 60 - 64 credit hours*			
BIO121	Anatomy and Physiology I (lab)	4	BIO101 or Proficiency			
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123			
BIO123	Principles of Human Structure and Function (lab)	5	BIO101 or Proficiency			
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141			
BIO241	General Genetics (lab)▲-	4	BIO141			
BIO242	Cell & Molecular Biology (lab) ▲+	4	BIO141			
CHM243	Biochemistry I	3	CHM123 or CHM141			
MTH223	Analytic Geometry – Calculus I^	4	MTH135 or (MTH125 and MTH130) or Proficiency			
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 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			
SCI271	Special Topics in Science I	1	Sophomore in Program			
SCI272	Special Topics in Science II	2	Sophomore in Program			
SCI273	Special Topics in Science III	3	Sophomore in Program			
	TOTAL CREDIT HOURS	60-64				

<sup>^</sup>Based upon SSC placement score

<sup>\*</sup>Please obtain the complete list of entrance requirements for the professional medical school(s) to which you would like to apply and consult your academic advisor to determine what electives

 <sup>♣-</sup>Fall only courses. Please see your academic advisor for availability.
 ♣+Spring only courses. Please see your academic advisor for availability.

**2024-25 Catalog** 

# PRE-MEDICAL PROFESSIONAL CONCENTRATION

(Pre-Pharmacy, Pre-Medicine, Pre-Dentistry, Pre-Veterinary)

1280

Effective Summer 2024

#### **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 on the next page provides the normal scheduling option for full-time associate degree 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 Transferology at <a href="http://www.transferology.com">http://www.transferology.com</a> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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.

First Semester SSC101 BIO141 CHM141	Student Success Seminar^^ General Biology I (lab) General Chemistry I (lab)^▲	Credit Hours 1 4 5	Pre- and Co-requisites Take first semester  (CHM101 or Proficiency) or (MTH024 or MTH025 or
Mathematics, Statistics, Logic Elective <sup>4</sup>		4-5 14-15	Proficiency) Check for prerequisite
Second Semester BIO142 CHM142 ENG124	General Biology II (lab) General Chemistry II (lab) College Composition (required)	4 5 3	CHM141 Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency
Arts and Humanities Elective Third Semester (Summer)	e <sup>3</sup>	3 15	Check for prerequisite
SOC225 Arts and Humanities Electiv Fourth Semester	Diversity in American Society ( <b>required</b> ) $e^{3}$	3 <u>3</u> 6	IDS102 <b>or</b> Proficiency Check for prerequisite
CHM241  Concentration Elective <sup>5*</sup>	Organic Chemistry I (lab) ▲-	5 3-5	CHM142 Check for prerequisite
-	ral Communication Elective <sup>1</sup>	3 11-13	Check for prerequisite
Fifth Semester CHM242	Organic Chemistry II (lab)▲+	5	CHM241
MTH124	Statistics <sup>^</sup>	3	MTH022 or Pre-Co-MTH024 or Proficiency
Social and Behavioral Scien Concentration Elective <sup>5*</sup>	ce Elective <sup>2</sup>	3 <u>3 - 4</u> <b>14-15</b>	Check for prerequisite Check for prerequisite
	TOTAL CREDITS	60-64	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>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 in high school. Students who did not complete chemistry in high school, or who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

<sup>&</sup>lt;sup>1</sup> English Composition and Oral Communication Electives: COM121, COM122, ENG231

<sup>&</sup>lt;sup>2</sup> Social and Behavioral Science Electives: BUS122, PSY121, SOC121

<sup>&</sup>lt;sup>3</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>&</sup>lt;sup>4</sup>Mathematics, Statistics, Logic Electives: MTH125 or MTH135

<sup>5</sup> Concentration Electives: BIO121, BIO122, BIO123, BIO221, BIO241, BIO242, CHM243, MTH223, PHY101, PHY121, PHY122, SCI271, SCI272, SCI273

<sup>\*\*</sup>Please obtain the complete list of entrance requirements for the professional medical school(s) to which you would like to apply and consult your academic advisor to determine what electives to take

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



# ASSOCIATE OF SCIENCE – GENERAL

**2024-25 Catalog** 

Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Arts and Sciences Division

Chemistry/Physics Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EX	PERIENCE			-
SSC101	Student Success Seminar^^	1	Take first semester	
COMPUTER AP	PLICATIONS			
ITD122	Computer Applications for Professionals^ (required)	3	ITD100 or Proficiency	
ENGLISH COM	POSITION AND ORAL COMMUNICATION	I: 6 credit ho		
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-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		
SOCIAL AND BI	EHAVIORAL SCIENCES: 9 credit hours min	imum across	two disciplines	
PSC121	U.S. Government and Politics	3		
PSY121	General Psychology^	3	IDS102 or Proficiency	
PSY123	Human Growth & Development	3	PSY121	
PSY124	Industrial/Organizational Psychology	3		
PSY220	Social Psychology	3	PSY121	
PSY221	Abnormal Psychology	3	PSY121	
PSY131	Psychology of Personality	3		
BUS122	Basic Economics^	3	IDS102 or Proficiency	
BUS221	Microeconomics^	3	IDS102 or Proficiency	
BUS222	Macroeconomics^	3	IDS102 or Proficiency	
SOC121	Sociology^	3	IDS102 or Proficiency	
SOC122	Society and Technology	3		
SOC123	Dynamics of the Family	3		
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency	

<sup>^</sup> Based on SSC placement scores

<sup>^^</sup> To promote student success, this course should be taken in the first semester

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

## **ASSOCIATE OF SCIENCE – GENERAL**

7106

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
ARTS AND HUM	ANITIES: 6 credit hours minimum across two	disciplines		
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG235	Introduction to Shakespeare ▲+	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
ENG239	Film Appreciation	3		
ENG240	Women's Literature	3		
ENG241	Major Modern Writers ▲+	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
HIS221	World Civilization to 17 <sup>th</sup> Century	3		
HIS222	World Civilization from 17th Century	3		
PHL122	Ethics	3		
NATURAL SCIEN	CES: 12 credit hours minimum (1 lab course req	uired)		
BIO101	Introduction to Anatomy and Physiology^	3	IDS102 or Proficiency	
BIO121	Anatomy and Physiology I (lab) <sup>β</sup>	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		
BIO200	Ecology (lab)▲-	4	BIO141 or BIO142	
BIO241	General Genetics (lab)	4	BIO141	
BIO242	Cell & Molecular Biology (lab) ▲+	4	BIO141	
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
CHM100	Exploring Science and Technology (lab)	4		
CHM101	Introduction to Chemistry^	4	(MTH022 or MTH023 or Proficiency) or MTH105 or MTH107	
CHM105	Introduction to Forensic Science (lab)	3		
CHM205	Forensic Chemistry (lab)	4	CHM123 or CHM141 or CHM105	

<sup>^</sup> Based on SSC placement scores

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability. ▲+Spring only courses. Please see your academic advisor for availability.

 $<sup>^{\</sup>beta}$  Credit will be granted for BIO121 or BIO123 but not both.

Effective Summer 2024

# **ASSOCIATE OF SCIENCE - GENERAL**

7106

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
NATURAL SCIEN	NCES, continued: 12 credit hours minimum (1 la	ab course r	equired)	
CHM123	General, Organic, and Biological Chemistry (lab)	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 or (CHM101 or Proficiency)	
CHM141	General Chemistry I (lab)	5	CHM101 or Proficiency	
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		
PHY101	Principles of Physics^ (lab)	4	[(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107] and (IDS102 or Proficiency)	
PHY105	Astronomy (lab)	4	•	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
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 MTH224 and Co-MTH225	
MATHEMATICS	, STATISTICS, AND LOGIC: 3-5 credit hours	minimum		
MTH118	Quantitative Reasoning	3		
MTH124	Statistics^	3	MTH093 or Pre-Co-MTH024 or Proficiency	
MTH125	College Algebra^µ	4	MTH094 or Pre-Co-MTH025 or Proficiency	
MTH130	Trigonometry <sup>µ</sup>	3	MTH125	
MTH135	Precalculus^µ— 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	
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 EL	ECTIVES TO COMPLETE DEGREE*	15-25		
	TOTAL CREDIT HOURS (60 credit minimum)	60-65		

<sup>^</sup> Based on SSC placement scores

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

▲+Spring only courses. Please see your academic advisor for availability.

"Credit will be granted for MTH135 or (MTH125 and/or MTH130) but not both.

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 $<sup>\</sup>underline{^*\underline{Additional\ Electives}}.\ Choose\ from\ previous\ pages\ or\ the\ additional\ electives\ list\ shown\ on\ the\ next\ page.$ 

## **ASSOCIATE OF SCIENCE - GENERAL**

7106

#### 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 20-25 elective credit hours from the previous pages or the list below to reach a minimum of 60 credit hours. Please note, courses on the previous pages are OT36 and/or TAG with the exception of SSC101 and IDS122; the listing on this page may contain OT36 or TAG courses. Please see your academic advisor for assistance with course selection.

	TRANSFERRED ASSURANCE GUARANTEED (TAG) COURSES				
Course Number	Course Title Credits Pre- and Co-Requisites		Pre- and Co-Requisites	Completed Sem./Year	
ASL122	American Sign Language I	4			
ASL124	American Sign Language II	4	ASL122 or Proficiency		
ASL221	American Sign Language III	4	ASL124		
BIO124	Human Diseases	3	BIO122 or BIO123		
BIO125	Medical Terminology	3			
CJS121	Introduction to Criminal Justice	3			
CJS129	Corrections	3			
CJS221	Criminology	3	CJS121		
COM123	Small Group Communication	3	IDS102 or Proficiency		
COM125	Introduction to Communication Theory^▲-	3	IDS102 or Proficiency		
COM126	Introduction to Mass Communication A+	3	-		
SOC221	Social Problems	3	SOC121		
PSC221	State and Local Government	3	IDS102 or Proficiency		
PSY131	Psychology of Personality	3	-		
FIN110	Personal Finance	2			

ADDITIONAL ARTS & SCIENCES COURSES				
Biology	Social and Behavioral Sciences			
BIO123 Principles of Human Structure & Function (lab)(5)# <sup>β</sup>	GER121 Introduction to Gerontology (3)			
BIO222 Pharmacology (3)	GER122 Psychosocial Aspects of Aging (3)			
	PSC122 Introduction to Law and the Legal System (3)			
Chemistry	PSC222 Public Policy (3)			
CHM243 Biochemistry I (3)	PSY222 Psychological Aspects of Therapy (3)			
	SOC222 Juvenile Delinquency (3)			
English and Modern Languages				
ENG125 Technical Editing & Layout (3) ▲+	Sciences			
ENG126 Technical Grammar and Style (3)	SCI271 Special Topics in Science I (1)			
ENG227 Writing for Media (3)	SCI272 Special Topics in Science II (2)			
ENG228 Writing for the Web (3)▲-	SCI273 Special Topics in Science III (3)			
ENG229 Grant Writing (3)				
SPN100 Elementary Spanish I (4)				
SPN200 Elementary Spanish II (4)▲+				
General	English Composition and Oral Communication			
SSC201 Study Away (1)	COM223 Interviewing (3)▲-			
STN100 State Tested Nurse Aide (3)				
NTR121 Nutrition for Health (3)				
ASL121 Introduction to Deaf Culture Community (3)				

#BIO121 and BIO122 may be substituted for BIO123.

- ▲-Fall only courses. Please see your academic advisor for availability.
- ▲+Spring only courses. Please see your academic advisor for availability.

 $^{\beta}$  Credit will be granted for BIO121 or BIO123 but not both.

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#### FULL-TIME STUDENT ADVISING NOTES

#### **Academic Advising**

Students should make an appointment to see their advisor before registering for classes each semester to discuss their academic progress and plans as well as career plans.

#### 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 the website of the university and program to which you are transferring for their course requirements and https://www.transferology.com/ to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 approved and/or 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.

#### 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.

First Semester SSC101 ITD122	Student Success Seminar^^ Computer Applications for Professionals^	Credit Hours 1 3	<u>Pre- and Co-requisites</u> Take first semester ITD100 <b>or</b> Proficiency
ENG124	College Composition <sup>^</sup> (Required)	3	Co-ENG024 or Co-ENG011 or Proficiency
Mathematics, Statist	tics, and Logic Elective <sup>2</sup> ^	3-5	Check for prerequisites
Natural Science Ele		<u>3-5</u>	Check for prerequisites
		13-17	<i>v</i> 1 1
Second Semester			
Elective <sup>6</sup>		3-5	Check for prerequisites
Natural Science Ele	ctive ♣³^	3-5	Check for prerequisites
Social and Behavior	al Science Elective 5^	3	Check for prerequisites
English Composition	n and Oral Communication Elective <sup>4</sup>	<u>3</u>	Check for prerequisites
		12-16	
Third Semester			
SOC225	Diversity in American Society (Required)	3	IDS102 or Proficiency
Arts and Humanities	s Elective <sup>1</sup>	3	Check for prerequisites
Elective <sup>6</sup>		3-5	Check for prerequisites
Natural Science Ele	ctive ▲ ³^	<u>3-5</u>	Check for prerequisites
		12-16	
Fourth Semester			
Arts and Humanities	s Elective <sup>1</sup>	3	Check for prerequisites
Natural Science Ele		3-5	Check for prerequisites
Social and Behavior	al Science Elective ⁵∧	3	Check for prerequisites
	ditional $0-14$ credit hours to reach 60-65 credit hours)	0-14	Check for prerequisites
,	,	9-25	v 1 1
	TOTAL CREDITS	60-65	

<sup>^</sup>Based on SSC placement scores.

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

A 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.

<sup>&</sup>lt;sup>1</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG235, ENG236, ENG237, ENG239, ENG240, ENG241, HIS121, HIS121, HIS221, HIS222, PHL122 <sup>2</sup> Mathematics, Statistics and Logic Electives: MTH118, MTH124, MTH125, MTH130, MTH135, MTH223, MTH224, MTH225, MTH226, MTH227

<sup>&</sup>lt;sup>3</sup> Natural Sciences Electives: BIO101, BIO121, BIO122, BIO126, BIO127, BIO128, BIO129, BIO130, BIO141, BIO142, BIO200, BIO241, BIO242, BIO221, CHM100, CHM101, CHM105, CHM205, CHM123, CHM141, CHM242, CHM241, CHM242, GEO141, PHY101, PHY105, PHY121, PHY122, PHY221, PHY222

<sup>&</sup>lt;sup>4</sup> English Composition and Oral Communication Electives: ENG221, ENG230, ENG231, COM121, COM122

<sup>&</sup>lt;sup>5</sup> Social and Behavioral Science Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY123, PSY124, PSY220, PSY221, PSY131, SOC121, SOC122, SOC123, SOC225

<sup>6</sup> Electives: BIO123, BIO124, BIO125, BIO222, CHM243, CHM244, ENG125, ENG227, ENG228, ENG229, ENG239, ENG240, SPN100, SPN200, COM223, GER121, GER122, PSC212, PSC221, PSC222, PSY222, SOC222, CST121, SC1271, SC1272, SC1273, SSC201, STN100 or any additional English Composition and Oral Communication, Social and Behavioral Science, Arts and Humanities, Mathematics, or Natural Science electives.



# ASSOCIATE OF SCIENCE

# **PHYSICS**

2024-25 Catalog
Effective Summer 2024

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The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Arts and Sciences Division

Physics Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EX	PERIENCE:			
SSC101	Student Success Seminar^^	1	Take first semester	
CONCENTRATI	ON 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 MTH224 and Co-MTH225	
MTH224	Analytic Geometry and Calculus II	4	MTH223	
MTH225	Analytic Geometry and Calculus III	4	MTH224	
NATURAL SCIE	NCES: 8 credit hour minimum			
PHY105	Astronomy (lab)	4		
CHM105	Introduction to Forensic Science (lab)	3		
CHM141	General Chemistry I (lab) (required)	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab)	5	CHM141	
CHM205	Forensic Chemistry (lab)	3	CHM123 or CHM141 or CHM105	
GEO141	Physical Geology	4		
BIO141	General Biology I	4		
BIO142	General Biology II	4		
MATHEMATICS	S, STATISTICS, AND LOGIC: 4 credit hours m	inimum		
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	
MTH226	Linear Algebra ▲-	3	MTH224	
MTH227	Ordinary Differential Equations ▲+	3	MTH224	
ENGLISH COMI	POSITION AND ORAL COMMUNICATION:	6 credit ho	ours required	
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing (recommended)	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		

 $<sup>^{\</sup>wedge}\,Based$  on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year			
ARTS AND HUMANITIES: 6 credit hours across two disciplines							
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				
ENG240	Women's Literature	3	ENG124				
HIS121	U.S. History I to 1877	3					
HIS122	U.S. History II from 1877	3					
HIS221	World Civilization to 17 <sup>th</sup> Century	3					
HIS222	World Civilization From 17th Century	3					
PHL122	Ethics	3					
SOCIAL AND BEHAVIORAL SCIENCES: 6 credit hours across two disciplines							
BUS122	Basic Economics^	3	IDS102 or Proficiency				
BUS221	Microeconomics^	3	IDS102 or Proficiency				
BUS222	Macroeconomics^	3	IDS102 or Proficiency				
PSY121	General Psychology^	3	IDS102 or Proficiency				
PSY124	Industrial/Organizational Psychology	3					
PSY220	Social Psychology	3	PSY121				
PSC121	U.S. Government and Politics	3					
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency				
ELECTIVES: Select additional credits from Natural Sciences, Mathematics, or the electives categories to complete the total of 60-65 credit hours							
CSE122	Programming Logic and Problem Solving	3					
CST121	Modeling & Simulation	3	MTH221 or MTH223				
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency				
SOC121	Sociology^	3	IDS102 or Proficiency				
SOC122	Society and Technology	3	·				
SCI271	Special Topics in Science I	1					
SCI272	Special Topics in Science II	2					
SCI273	Special Topics in Science III	3					
SSC201	Study Away	1					
	TOTAL CREDIT HOURS (60 credits minimum)	60-65					

<sup>^</sup> Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. 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 to discuss their academic progress as well as career plans.

#### Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in four 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 the website of the university and program to which you are transferring for their course requirements. Also visit https://www.transferology.com/ to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 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.

First Semester SSC101 Natural Science Electric ENG124	College Composition <sup>^</sup> (required)	<u>Credit Hours</u> 1  3-5  3	Pre- and Co-requisites  Take first semester.  Check for prerequisite  Co-ENG024 or Co-ENG011  or Proficiency
SOC225 MTH223	Diversity in American Society (required) Analytic Geometry and Calculus I ^	3 <u>4</u> 14-16	IDS102 <b>or</b> Proficiency MTH135
Second Semester			
<u> </u>	and Oral Communication Elective <sup>1</sup>	3	Check for prerequisite
CHM141	General Chemistry I (required)	5	(CHM101 or Proficiency) <b>or</b> (MTH024 or MTH025 or Proficiency)
Natural Science or Mo	athematics or Other Elective 4,5,6	3-4	Check for prerequisite
MTH224	Analytic Geometry and Calculus II^	4 15-16	MTH223
Third Semester			
Arts and Humanities I	Elective <sup>3</sup>	3	Check for prerequisite
Social and Behavioral Science Elective <sup>2</sup>		<u>3</u> 6	Check for prerequisite
		6	
Fourth Semester			
PHY221	General Physics I with Calculus (lab)▲-	5	MTH223 and Co-MTH224
MTH225	Analytic Geometry and Calculus III	4	MTH224
Arts and Humanities Elective <sup>3</sup>		3	Check for prerequisite
E'01 G		12	
<u>Fifth Semester</u> PHY222	General Physics II with Calculus (lab)▲+	5	PHY221 and MTH224 and Co-MTH225
Natural Science Electi		4	Check for prerequisite
Natural Science or Mathematics or Other Elective 4,5,6		4-5	Check for prerequisite  Check for prerequisite
1. attai ai Science of Title		13-15	encenjo. prerequisite
	TOTAL CREDITS	60-65	

^Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>&</sup>lt;sup>1</sup> English Composition and Oral Communication Electives: COM121, COM122, ENG221, ENG231

<sup>&</sup>lt;sup>2</sup> Social and Behavioral Science Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY124, PSY220

<sup>&</sup>lt;sup>3</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, ENG240, HIS121, HIS122, HIS221, HIS222, PHL122

<sup>&</sup>lt;sup>4</sup>Natural Science Electives: PHY105, CHM105, CHM142, CHM205, BIO141, BIO142, GEO141

<sup>&</sup>lt;sup>5</sup> Electives: CSE122, SOC121, SOC122, ITD122, SCI271, SCI272, SCI273, SSC201

<sup>&</sup>lt;sup>6</sup> Select additional courses to complete the total of 60-65 credit hours

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.



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#### Arts-Educ/ Liberal Arts/ Math

Arts, Humanities & Rdg

#### COM121 EFFECTIVE SPEAKING

Credit Hours: 3 Contact Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to introduce students to the process of researching, writing, and presenting speeches. Students will explore the basic theories and principles of oral communication and will write and deliver formal speeches throughout the course. Areas of concentration include researching, outlining, organizing, language, verbal and nonverbal delivery, critical listening, and persuasion. TAG OCM004, summer 2007 TMCOM, Autumn 2008

#### Pre-regs:

#### 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 effective Autumn 2008.

#### Pre-regs:

#### 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-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 



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#### Arts-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 - 18

Or Test & Score: ACT Composite - 22

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102

Or IDS102

Or IDS102

Or IDS102

#### 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:



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#### Arts-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-regs:

#### 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:** 

#### 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:** 



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#### Arts-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:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

#### 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

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 



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DataBase: Prod
DataBlock: Course Catalog - Credit

#### Arts-Educ/ Liberal Arts/ Math

**Arts, Humanities & Rdg** 

#### HIS121 U.S. 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. OT36 approved, effective spring 2024

Pre-regs:

#### HIS122 U.S. 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. OT36 approved effective spring 2024

Pre-regs:

#### 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-regs:



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#### Arts-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-regs:

#### IDS115 College & Career Succ Skills

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is designed to aid students in gaining success skills needed for constructive and efficient learning both in college and other life settings. Topics include punctuality and discipline, study and test-taking skills, critical thinking/problem solving, library use, and a variety of techniques in oral and written communication. Other workplace topics such as reliability, teamwork and collaboration, creativity/innovation, leadership, professionalism, techniques to demonstrate a commitment to being drug-free, and respect for global/intercultural awareness will be explored. Students will also self-advocate and articulate their strengths, knowledge, and experiences relevant to success in a job for post-secondary education.

Pre-regs:

#### 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 summer 2020. TMAH Approved effective Autumn 2008.

Pre-regs:

**Education** 



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#### Arts-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, Americans with Disabilities Act laws. Five observation hours are required.

Pre-regs:

#### ASL122 AMERICAN SIGN LANGUAGE I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is the first in a series of three American Sign Language courses and is based on the integration of learning outcomes across interpersonal, receptive and expressive modes of communication. Students accomplish real-world communicative tasks in culturally appropriate ways as they gain familiarity with products, practices, and perspectives of American Deaf culture. Students learn grammar, vocabulary, structures, and spatial orientation to enable them to meet functional performance goals at this level and to build a foundation for continued language learning. During this course, students generally perform in the novice range, although a few abilities may emerge in the intermediate range. Ten Community Learning Experience (CLE) hours are required. TAG approved--effective Summer 2016 OFL025 (TAG approved sequence (ASL124 and ASL122) OFL029 effective spring 2018)

Pre-reqs:

#### 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:



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#### Arts-Educ/ Liberal Arts/ Math

**Education** 

#### ASL124 AMERICAN SIGN LANGUAGE II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is the second in the series of three American Sign Language courses and is based on the integration of learning outcomes across interpersonal, receptive, and expressive modes of communication. Students accomplish real-world communicative tasks in culturally appropriate ways as they gain familiarity with products, practices, and perspectives of American Deaf culture. Students learn grammar, vocabulary, structures, and spatial orientation to enable them to meet functional performance goals at this level and to build a foundation for continued language learning. During this course, students perform better and stronger in the novice range while some abilities emerge in the intermediate range. Ten Community Learning Experience (CLE) hours are required. TAG approved OFL026 effective spring 2018 (TAG approved sequence (ASL124 and ASL122) OFL029 effective spring 2018)

Pre-reqs:

ASL122

Or ASL122

#### ASL221 AMERICAN SIGN LANGUAGE III

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is the third in a series of three language courses and is based on the integration of learning outcomes across interpersonal, receptive, and expressive modes of communication. Students accomplish real-world communicative tasks in culturally appropriate ways as they gain familiarity with products, practices, and perspectives of American Deaf culture. Students learn grammar, vocabulary, structures, and spatial orientation to enable them to meet functional performance goals at this level and to build a foundation for continued language learning. During this course, students can consistently perform in the novice range while more abilities emerge and develop in the intermediate range. Ten Community Learning Experience (CLE) hours are required. TAG approved OFL027 effective spring 2018

#### Pre-reqs:

ASL124

#### 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

And ASL221

Can be Taken Concurrently



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#### Arts-Educ/ Liberal Arts/ Math

**Education** 

#### EDU121 INTRO EARLY CHILDHOOD EDUC

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This introductory course provides a general introduction to the field of early childhood education as well as related services that support children and their families, birth to age 5. This course is intended for those who are interested in the field of early childhood as well as those who are still undecided but are considering a career working with young children. Content in this course provides an overview of the profession of early childhood education and the role of the teacher/caregiver. It explores the history of early childhood education, major models and programs that support and/or educate young children, the theories and practices that are the foundations for such programs, and current issues in the classroom/child setting. Thirty observation hours are required. CTAG CTECE001 effective Spring 2018. ITAG-ITECE001, effective spring 2023.

#### Pre-regs:

Or Test & Score: ACT English - 18

Or Test & Score: Accuplacer English/Writeplacer - 5

Or Test & Score: Compass English - 070

Or Test & Score: HS English Proficiency - 3

Or ENG011

**ENG101** 

Or ENG105

#### **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. Ten observation hours required.

#### Pre-regs:

**EDU131** 

#### EDU123 Health, Safety, and Nutrition

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course, students will examine and discuss content and issues related to the health, safety, and nutrition of young children birth through age 5. Students will explore information that relates to the development of safe learning environments, healthy nutrition, and other positive interactions that support optimal growth and development of young children. Ways to engage the family in supporting these practices as well as licensing rules and information about requirements will be included. Five observation hours are required. CTAG approved CTECE002 effective Spring 2018 ITAG-ITECE002, effective spring 2023.

#### **Pre-reqs:**

**EDU121** 

Or EDU130

Or EDU131



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#### Arts-Educ/Liberal Arts/Math

**Education** 

#### EDU124 INFANT TODDLER CURRICULUM

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course engages participants in exploration and discussion about high-quality care giving and developmentally appropriate practices when engaging with infants and toddlers and their families. The importance of quality environments that support development, language and literacy, family engagement, advocacy, positive guidance, and professionalism are discussed as they relate to required standards and the care of infants and toddlers. Five observation hours are required. CTAG approved CTECE003 effective Spring 2018

#### **Pre-reqs:**

**EDU131** 

#### 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

#### Pre-regs:

#### EDU130 INTRO TO THE TEACHING PROFESSN

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This introductory course explores the purposes, organizations, and outcomes of schooling from the perspectives of the field of social foundations in education. Candidates undertake critical inquiry into teaching as a profession. Licensure requirements, teachers' legal responsibilities, and the accountability of public schools are also explored. TAG OED007 approved spring 2018, CTAG CTEDU007 approved spring 2018

#### **Pre-reqs:**

Or Test & Score: ACT English - 18

Or Test & Score: Accuplacer English/Writeplacer - 5

Or Test & Score: Compass English - 070

Or Test & Score: HS English Proficiency - 3

Or Test & Score: GED Reasoning Through Lang Art - 1

Or ENG011

Or ENG011

Or ENG101

ENG105



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#### Arts-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 introductory course explores the purposes, organizations, and outcomes of schooling from the perspectives of the field of social foundations in education. Candidates undertake critical inquiry into teaching as a profession. Licensure requirements, teachers' legal responsibilities, and the accountability of public schools are also explored. TAG OED007 approved spring 2018, CTAG CTEDU007 approved spring 2018

#### Pre-reqs:

Or ENG124

#### EDU221 LANGUAGE ARTS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Examines research-based 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 and utilization of children's interest in planning. Five field observation hours required.

#### **Pre-reqs:**

**EDU122** 

Or EDU124

Or EDU130

#### EDU223 COMMUNITY & FAM BASED PR

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores educational considerations for teachers including the policies, theories, practices, skills, and knowledge of home, school, and community partnerships. Candidates will examine the multiple influences on the whole child; accessibility of community services and supports; ethical, practical, and culturally competent decisions to foster family engagement; knowledge and skills needed to address family structure, socio-cultural and linguistic backgrounds, identities and customs, and advocacy for children and families. Five volunteer/observation hours are required. TAG approved OED011 effective spring 2019

#### **Pre-reqs:**

**EDU121** 

Or EDU130



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#### Arts-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:

**EDU121** 

Or EDU130

#### **EDU225 THE EXCEPTIONAL CHILD**

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This is a survey course to prepare all educators to teach diverse learners, including those with exceptionalities. It covers developmental characteristics, assessment methods, intervention strategies, and ethical principles for students in education and community settings. TAG OED009 approved Spring 2018

#### Pre-reqs:

**EDU121** 

Or EDU130

Or EDU131

#### **EDU227 ECE Practicum & Seminar**

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:

**EDU124** 

And EDU132

And EDU221

Or EDU232

And EDU235

Can be Taken Concurrently



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#### Arts-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.

#### Pre-regs:

Or EDU130 EDU221

#### **EDU229 EDUCATIONAL PSYCHOLOGY**

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores major theories of human development, learning, and motivation. Planning of instruction, teaching strategies, assessment, classroom management, and diversity of learners are examined. Authentic educational practices and application of research in these areas are also emphasized. TAG OED008 approved Spring 2018

#### Pre-reqs:

**EDU130** 

Or EDU131

#### **EDU232** Literature Across the Curricul

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on current issues, research, and effective practices regarding the use of children's literature across the early childhood classroom curriculum. Students will learn how to select quality children's books for use in a variety of content areas, develop respect and appreciation for numerous types of literature, authors, illustrators, and poets. Students will plan lessons that use children's literature to effectively support and enrich instruction in a variety of classroom settings. Five observation hours are required.

#### Pre-reqs:

**EDU122** 

Or EDU130



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#### Arts-Educ/ Liberal Arts/ Math

**Education** 

#### EDU235 Incl Class for Young Child

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 socio-emotional/behavioral and physical disabilities are studied. Social, educational, physical and emotional implications of learning and development are examined. Methods of assessment, interventions, and accommodations based on developmentally and individually appropriate procedures are presented. The range of service needs are explored using an interdisciplinary approach. Five field observation hours are required.

#### Pre-reqs:

EDU225

#### **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-regs:

#### **ENGO11 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-regs:

Or Test & Score: ACT English - 16

Or Test & Score: Accuplacer English/Writeplacer - 4

Or Test & Score: Compass English - 050

Or Test & Score: SAT Verbal - 450

**ENG010** 

Or ENG103



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## Arts-Educ/Liberal Arts/Math

**English** 

#### ENG024 Writing Workshop

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides additional instructional support for students who are co-enrolled in ENG124. The course is designed to assist students in developing academic writing and reading strategies and skills needed to successfully complete ENG124 assignments and curriculum. Course work includes practice and application of the major components of composition, such as process writing, audience awareness, critical thinking, and textual analysis through individualized and group instruction.

#### Pre-regs:

#### **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. OT36-TME001, effective summer 2023

#### **Pre-reqs:**

Test & Score: ACT English - 18

Or Test & Score: Accuplacer English/Writeplacer - 5

Or Test & Score: Compass English - 070

Or Test & Score: HS English Proficiency - 3

Or Test & Score: GED Reasoning Through Lang Art - 1

Or ENG011 Can be Taken Concurrently

Or ENG024 Can be Taken Concurrently

Or ENG101

Or ENG105

## 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-regs:



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## Arts-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** 

#### **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-regs:

ENG124

### **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-regs:



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## Arts-Educ/ Liberal Arts/ Math

**English** 

#### 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-regs:

**ENG124** 

#### 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

## **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:**



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## Arts-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. OT36-TME002, effective summer 2023.

#### Pre-regs:

**ENG124** 

#### **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:**

ENG124

## 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. OT36-TMAH, effective summer 2023.

#### Pre-regs:



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## Arts-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. TAG approved OAH056 effective Summer 2010. OT36-TMAH, effective summer 2023.

#### Pre-regs:

**ENG124** 

#### **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. TMAH Approved effective Spring 2016.

#### **Pre-reqs:**

ENG124

### 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. OT36-TMAH, effective summer 2023.

#### Pre-regs:



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## Arts-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. TAG approved Summer 2012 OAH054. OT36-TMAH, effective summer 2023.

### Pre-reqs:

**ENG124** 

#### **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. OTM approved TMAH, effective summer 2020.

#### Pre-regs:



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## Arts-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. OTM approved TMAH, effective summer 2020

### Pre-reqs:

**ENG124** 

### **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.TMAH Approved effective Spring 2016.

#### Pre-regs:

ENG124

### **ENG250 TECHNCL COMMUNICATIS 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-regs:** 



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## Arts-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 incorporates the five world-readiness standards for learning languages – Communication, Communities, Comparisons, Connections, and Cultures – to give students the ability to undertake real-world linguistic tasks in Spanish across a wide range of topics and settings. The communication methods used to incorporate the standards are interpersonal, interpretative, and presentational to enable students to achieve a novice-mid to novice-high level of performance. Students learn grammar, vocabulary, and structures of the language to meet performance goals and build a foundation of continuous language learning. Students practice language using tasks in culturally appropriate ways to assimilate the Spanish language within the perspective of Hispanic culture. Students practice speaking through both interpersonal tasks and presentations to integrate speaking and writing the language while visually presenting information. TAG OFL019 approved, effective spring 

Pre-regs:

#### SPN200 ELEMENTARY SPANISH II

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course incorporates the five world-readiness standards for learning languages – Communication, Communities, Comparisons, Connections, and Cultures – to give students the ability to undertake real-world linguistic tasks in Spanish across a wide range of topics and settings. The communication methods used to incorporate the standards are interpersonal, interpretative, and presentational to enable students to achieve a novice-high to intermediate-low level of performance. Students learn grammar, vocabulary, and structures of the language to meet performance goals and build a foundation of continuous language learning. Students practice language using tasks in culturally appropriate ways to assimilate the Spanish language within the perspective of Hispanic culture. Students practice speaking through both interpersonal tasks and presentations to integrate speaking and writing the language while visually presenting information. TAG approved OFLO20, effective spring 2023.

SPN100

Or SPN100

#### **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:

#### **Mathematics**



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## Arts-Educ/ Liberal Arts/ Math

**Mathematics** 

### MTH005 Found for Math Allied Health

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course provides remediation for students who are co-enrolled in Math for Allied Health. It is designed to enhance student success. Topics to be covered are basic arithmetic, basic fractions and decimals, basic variables and equations, and basic percent and proportions.

Pre-regs:

#### MTH007 Foundation for Industrial Math

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course provides a mathematical foundation and practice in topics relevant to Industrial Math, along with intensive individualized instruction. Students will receive targeted support using a "just in time" model that will boost their understanding and learning of their college-level course.

**Pre-reqs:** 

## MTH018 Foundations Quan Reason

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides a mathematical calculation and reasoning foundation and practice in topics related to a Quantitative Reasoning course. It includes arithmetic and algebra review and practice. Students will also discuss, analyze, and construct mathematical arguments using reasoning and logic. The course is designed to provide just-in-time support as a corequisite for Quantitative Reasoning.

Pre-regs:



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## Arts-Educ/ Liberal Arts/ Math

**Mathematics** 

#### MTH020A 1st Half PrRq Math--MTH021-023

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is a shell course. This means that you register for MTH020A, but then your registration will be transferred to the correct prerequisite course required for your college-level math course. You will not get credit for this shell, but instead will get credit for one of the courses listed below.

Once you sign up for this shell course, you will be transferred into one of these courses. Both the shell and the courses listed below are 2-credit hours each.

- MTH021 Math Fundamentals
- MTH022 Pre-Statistics
- MTH023 Pre-College Algebra

#### MTH020B 2nd Half PrRq Math--MTH021-025

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is a shell course. This means that you register for MTH020A (or B), but then will be transferred to the correct prerequisite course required for your college-level math course. You will not get credit for this shell, but instead will get credit for one of the courses listed below.

Once you sign up for this shell course, you will be transferred into one of these courses. Both the shell and the courses listed below are 2-credit hours each. Note to advisors and students: MTH024 and MTH025 should only be taken by students who have taken more than one semester to finish their prerequisite courses. Otherwise, they should be taken with the appropriate college-level course.

- MTH021 Math Fundamentals MTH022 Pre-Statistics
- MTH023 Pre-College Algebra
- MTH024 Foundations for Statistics
- MTH025 Foundations for College Algebra

MTH020A

Can be Taken Concurrently

#### MTH021 **Math Fundamentals**

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 signed numbers; signed fractions; signed decimals; an introduction to variables; and solving equations.

**Pre-regs:** 



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## Arts-Educ/Liberal Arts/Math

#### **Mathematics**

## MTH022 Pre-Statistics

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 taking statistics or a quantitative reasoning course. Topics to be covered are ratios, rates and proportions; percent; and solving equations. Emphasis is placed on applications of concepts and mathematical reasoning.

### Pre-reqs:

Or Test & Score: M021 Transfer Prof/Placement - 3 MTH021

### MTH023 Pre-College Algebra

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 planning to take a STEM-related college level math course. Topics covered include linear graphing; linear systems of equations; exponents; polynomials; factoring; roots and radicals; and solving equations. Emphasis is placed on techniques and processes to prepare students for the analysis in a College Algebra or Precalculus course.

## Pre-reqs:

Or Test & Score: M021 Transfer Prof/Placement - 3 MTH021

#### MTH024 Foundations for Statistics

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course provides a mathematical foundation and practice in topics of an introductory level statistics course, along with intensive individualized instruction. Students will receive targeted support using a "just in time" model that will boost their understanding and learning of Statistics.

#### Pre-regs:

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: M022 Transfer Prof/Placement - 3

Or Test & Score: M023 Transfer Prof/Placement - 3

Or Test & Score: M092 Transfer Prof/Placement - 3



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## Arts-Educ/ Liberal Arts/ Math

#### **Mathematics**

#### MTH024 Foundations for Statistics

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course provides a mathematical foundation and practice in topics of an introductory level statistics course, along with intensive individualized instruction. Students will receive targeted support using a "just in time" model that will boost their understanding and learning of Statistics.

### Pre-reqs:

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

Or MTH022

Or MTH023

MTH092

#### 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-regs:

And Test & Score: ACT Math - 19

Or Test & Score: ACT Math - 19

And Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer College-level Math - 040

And Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M021 Transfer Prof/Placement - 3

Or Test & Score: M092 Transfer Prof/Placement - 3

And Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer AAF Math - 237

And Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 250



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## Arts-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: SAT Mathematics - 510

Or MTH005 Can be Taken Concurrently

Or MTH005 Or MTH020A

Or MTH020B

Or MTH021 MTH092

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 Test & Score: ACT Math - 19
Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040
Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1
Or Test & Score: M021 Transfer Prof/Placement - 3
Or Test & Score: NextGen Accuplacer AAF Math - 237



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## Arts-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:

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250
Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

MTH007 Can be Taken Concurrently

And MTH007 Can be Taken Concurrently

And MTH007 Can be Taken Concurrently

And MTH007 Can be Taken Concurrently

Or MTH020A

Or MTH020B

Or MTH021

Or MTH092

### MTH118 Quantitative Reasoning

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This is a college-level mathematics course focused on quantitative reasoning in real-world situations and data-analysis for students who are in a non-STEM major. Using numeracy, mathematical modeling, and statistical methods, students will use mathematical language to investigate, describe, analyze, calculate, interpret, and make decisions in real-world scenarios within fields such as personal finance, industry, and civics. OTM approved TMM011 effective summer 2021.

### **Pre-reqs:**

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510



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## Arts-Educ/Liberal Arts/Math

**Mathematics** 

#### MTH118 Quantitative Reasoning

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This is a college-level mathematics course focused on quantitative reasoning in real-world situations and data-analysis for students who are in a non-STEM major. Using numeracy, mathematical modeling, and statistical methods, students will use mathematical language to investigate, describe, analyze, calculate, interpret, and make decisions in real-world scenarios within fields such as personal finance, industry, and civics. OTM approved TMM011 effective summer 2021.

#### Pre-regs:

Or MTH018

Can be Taken Concurrently

Or MTH020B

MTH022

Or MTH023

## MTH118S Quan Reas w/Co(MTH118+MTH018)

Credit Hours: 6 Contact Hours: 6 Lecture Hours: 6 Lab Hours: 0 Other Hours: 0

This course is a "shell course" comprised of two components, Quantitative Reasoning (MTH118) and Foundations for Quantitative Reasoning (MTH018), lecture and corequisite respectively.

- \*\* Students who have completed MTH022 (or equivalent) with B or Better or by Placement are not required to take Foundations for Quantitative Reasoning (MTH018), the corequisite component. In this case, you should register for MTH118 (3 credit hours).
- \*\* Students will get separate credit for MTH118 (3 credit hours) and MTH018 (3 credit hours) upon successful completion of MTH118S. Pre-reas:

### 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 sample mean and proportions is used for statistical inference. Chi-Square goodness-of-fit test and least squares regression analysis for linear correlation are computed manually and with a statistical package such as SPSS, SAS, Minitab, Excel, or similar technology.

#### **Pre-regs:**

Or Test & Score: ACT Math - 19 Or Test & Score: ACT Math - 22

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer College-level Math - 055



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## Arts-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 sample mean and proportions is used for statistical inference. Chi-Square goodness-of-fit test and least squares regression analysis for linear correlation are computed manually and with a statistical package such as SPSS, SAS, Minitab, Excel, or similar technology.

### Pre-reqs:

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: Compass Algebra - 039

Or Test & Score: Compass Algebra - 052

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M024 Transfer Prof/Placement - 3

Or Test & Score: M093 Transfer Prof/Placement - 3

Or Test & Score: HS Math and Multiple Measures - 3

Or Test & Score: NextGen Accuplacer AAF Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 263

Or Test & Score: SAT Mathematics - 530

Or MTH020A

And MTH020B

Or MTH022

And MTH024 Can be Taken Concurrently

Or MTH024 Can be Taken Concurrently

Or MTH092

MTH093

Or MTH123



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## Arts-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: ACT Math - 19

Or Test & Score: ACT Math - 22

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer College-level Math - 055

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: Compass Algebra - 039

Or Test & Score: Compass Algebra - 052

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M024 Transfer Prof/Placement - 3

Or Test & Score: M093 Transfer Prof/Placement - 3

Or Test & Score: HS Math and Multiple Measures - 3

Or Test & Score: NextGen Accuplacer AAF Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 263

Or Test & Score: SAT Mathematics - 530

Or MTH020A

And MTH020B

Or MTH022

And MTH024 Can be Taken Concurrently

Or MTH024

Or MTH092

MTH093

Or MTH123



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## Arts-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-regs:

#### MTH124A

#### MTH124S Stats w/CoReq(MTH124+MTH024)

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

This course is a "shell course" comprised of two components, Statistics (MTH124) and Foundations for Statistics (MTH024), lecture and corequisite respectively.

- \*\* Students who have completed MTH022 (or equivalent) with B or Better or by Placement should register for this shell course, MTH124S (5 credit hours).
- \*\* Students who have completed MTH024 or MTH025 with B or Better or by Placement are not required to take Foundations for Statistics (MTH024), the corequisite component. In this case, you should register for MTH124 (3 credit hours). **Pre-regs:**
- \*\* Students will get separate credit for MTH124 (3 credit hours) and MTH024 (2 credit hours) upon successful completion of MTH124S.
  - Or Test & Score: ACT Math 19
  - Or Test & Score: Accuplacer College-level Math 040
  - Or Test & Score: Accuplacer Elementary Algebra 097
  - Or Test & Score: Compass Algebra 039
  - Or Test & Score: M022 Transfer Prof/Placement 3
  - Or Test & Score: M023 Transfer Prof/Placement 3
  - Or Test & Score: M092 Transfer Prof/Placement 3
  - Or Test & Score: NextGen Accuplacer AAF Math 237
  - Or Test & Score: NextGen Accuplacer QAS Math 250
  - Or Test & Score: SAT Mathematics 510
  - Or MTH020B
    - MTH022
  - Or MTH023



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## Arts-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, polynomial, radical, rational, exponential, logarithmic, and piecewise (including absolute value) equations and inequalities by applying analytical, graphical, and numerical methods of solution. Elementary 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 higher-order polynomial functions. Systems of equations will be solved by traditional algebraic methods. OT36-TMM001, effective summer 2023.

### Pre-reqs:

Or Test & Score: ACT Math - 19

Or Test & Score: ACT Math - 22

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer College-level Math - 055

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: Compass Algebra - 039

Or Test & Score: Compass Algebra - 052

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: M094 Transfer Prof/Placement - 3

Or Test & Score: HS Math and Multiple Measures - 3

Or Test & Score: NextGen Accuplacer AAF Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 263

Or Test & Score: SAT Mathematics - 530

Or MTH023

And MTH025 Can be Taken Concurrently

Or MTH025 Can be Taken Concurrently

MTH094

Or MTH094

Or MTH123



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## Arts-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-regs:

Or Test & Score: ACT Math - 19

Or Test & Score: ACT Math - 22

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer College-level Math - 055

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: Compass Algebra - 039

Or Test & Score: Compass Algebra - 052

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: M093 Transfer Prof/Placement - 3

And Test & Score: M094 Transfer Prof/Placement - 3

Or Test & Score: HS Math and Multiple Measures - 3

Or Test & Score: NextGen Accuplacer AAF Math - 276

Or Test & Score: NextGen Accuplacer QAS Math - 263

Or Test & Score: SAT Mathematics - 530

And MTH025 Can be Taken Concurrently

Or MTH025

MTH093

Or MTH093

And MTH094

And MTH094

Or MTH123



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## Arts-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-regs:

MTH125A

## MTH125S Col Alg w/CoReq(MTH125+MTH025)

Credit Hours: 6 Contact Hours: 6 Lecture Hours: 6 Lab Hours: 0 Other Hours: 0

This course is a "shell course" comprised of two components, College Algebra (MTH125) and Foundations for College Algebra (MTH025), lecture and corequisite respectively.

- \*\* Students who have completed MTH023 (or equivalent) with B or Better or by Placement should register for this shell course, MTH125S (6 credit hours).
- \*\* Students who have completed MTH025 with B or Better or by Placement are not required to take Foundations for College Algebra (MTH025), the corequisite component. In this case, you should register for MTH125 (4 credit hours).
- **Pre-reqs:**\*\* Students will get separate credit for MTH125 (4 credit hours) and MTH025 (2 credit hours) upon successful completion of MTH125S.
  - Or Test & Score: ACT Math 19
  - Or Test & Score: Accuplacer College-level Math 040
  - Or Test & Score: Accuplacer Elementary Algebra 097
  - Or Test & Score: Compass Algebra 039
  - Or Test & Score: M023 Transfer Prof/Placement 3
  - Or Test & Score: M092 Transfer Prof/Placement 3
  - Or Test & Score: NextGen Accuplacer AAF Math 237
  - Or Test & Score: NextGen Accuplacer QAS Math 250
  - Or Test & Score: SAT Mathematics 510
  - Or MTH020B

MTH023



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## Arts-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-regs:

MTH125

Or MTH125A

And MTH125B

#### 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-regs:

Or Test & Score: ACT Math - 22

Or Test & Score: Accuplacer College-level Math - 055

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: Compass Algebra - 052

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: HS Math and Multiple Measures - 3

Or Test & Score: NextGen Accuplacer AAF Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 263

Or Test & Score: SAT Mathematics - 530

MTH025

Or MTH093

And MTH094



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## Arts-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

Or Test & Score: Accuplacer College-level Math - 055

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: Compass Algebra - 052

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: M093 Transfer Prof/Placement - 3

And Test & Score: M094 Transfer Prof/Placement - 3

Or Test & Score: HS Math and Multiple Measures - 3

Or Test & Score: NextGen Accuplacer AAF Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 263

Or Test & Score: SAT Mathematics - 530

Or MTH025

MTH093

And MTH094

### 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-regs:

MTH135A



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## Arts-Educ/ Liberal Arts/ Math

#### **Mathematics**

#### MTH214 Discrete Mathematics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course will focus on mathematical reasoning and proof techniques as well as the applications of discrete mathematics in computer science. These include finite set theory, graph theory, combinatorics, propositional logic, discrete probability, relations, recursion, Boolean algebra, error-correcting codes, formal methodology and proof techniques. Precise mathematical notation will be used and emphasized.

## Pre-regs:

Or Test & Score: ACT Math - 27

Or Test & Score: Accuplacer College-level Math - 085

Or Test & Score: Compass Algebra - 084

Or Test & Score: NextGen Accuplacer AAF Math - 276

Or Test & Score: SAT Mathematics - 640

Or MTH125

Or MTH125A

And MTH125B

MTH135

Or MTH135A

And MTH135B

### 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. OT36-TMM005, effective summer 2023.

#### Pre-regs:

Or Test & Score: ACT Math - 27

Or Test & Score: Accuplacer College-level Math - 085

Or Test & Score: Compass Algebra - 084

Or Test & Score: NextGen Accuplacer AAF Math - 276

Or Test & Score: SAT Mathematics - 640

Or MTH125

And MTH130

MTH135



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## Arts-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. OT36-TMM005, effective summer 2023.

### Pre-reqs:

Or MTH135A And MTH135B

#### 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. OT36-TMM005, effective summer 2023.

#### Pre-regs:

Or Test & Score: ACT Math - 27

Or Test & Score: Accuplacer College-level Math - 085

Or Test & Score: Compass Algebra - 084

Or Test & Score: NextGen Accuplacer AAF Math - 276

Or Test & Score: SAT Mathematics - 640

Or MTH125

And MTH130

MTH135

Or MTH135A

And MTH135B



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## Arts-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. OT36-TMM005, effective summer 2023.

#### Pre-regs:

MTH223A

#### MTH224 ANALYTICAL GEO & 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.

MTH223 Or MTH223A

And MTH223B

## 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. TAG approved OMT018, effective spring 2020

#### Pre-regs:



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## Arts-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.

#### **MTH224**

### 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.

MTH224

#### **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.



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## Arts-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-regs:

#### 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:** 

## 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-regs:



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## Arts-Educ/ Liberal Arts/ Math

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KARC100 Un	derstanding	Architecture
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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:

## 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:

## **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.



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## Arts-Educ/ Liberal Arts/ Math

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KARF140	<b>Painting</b>	1
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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:

### **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:

### **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.



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## Arts-Educ/ Liberal Arts/ Math

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KARF999 Fine Arts Core	Course	
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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:

### **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:

### **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.



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## Arts-Educ/ Liberal Arts/ Math

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KART120	Art Su	rvey
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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 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:

## **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.



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## Arts-Educ/ Liberal Arts/ Math

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See Kent State University course catalog at www.kent.edu.

KART220 Art History	I
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Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Pre-reqs:

## 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:

## **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.



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## Arts-Educ/ Liberal Arts/ Math

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KENG220	Great	<b>Books</b>	I

 $Credit\,Hours: 3\quad Contact\,Hours: 3\quad Lecture\,Hours: 3\quad Lab\,Hours: 0\quad Other\,Hours: 0$ 

See Kent State University course catalog at www.kent.edu.

## Pre-reqs:

## **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:

## KHIS110 History of Civilization I

 $Credit\ Hours: 3\quad Contact\ Hours: 3\quad Lecture\ Hours: 3\quad Lab\ Hours: 0\quad Other\ Hours: 0$ 

See Kent State University course catalog at www.kent.edu.



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## Arts-Educ/ Liberal Arts/ Math

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KHIS110	History	of Civilization	II
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 $Credit\, Hours: 3 \quad Contact\, Hours: 3 \quad Lecture\, Hours: 3 \quad Lab\, Hours: 0 \quad Other\, Hours: 0$ 

See Kent State University course catalog at www.kent.edu.

Pre-reqs:

### 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:

### 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.



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## Arts-Educ/ Liberal Arts/ Math

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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.

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### **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:

### **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.



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# Arts-Educ/ Liberal Arts/ Math

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KHUM99	Humanities	Core Course	
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 $Credit\ Hours: 4\quad Contact\ Hours: 4\quad Lecture\ Hours: 4\quad Lab\ Hours: 0\quad Other\ Hours: 0$ 

See Kent State University course catalog at www.kent.edu.

## Pre-reqs:

### **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:

# **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.



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<b>KMTH999</b>	Math	and	Critical	Reaso	oning

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:

## **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:

# **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.



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# Arts-Educ/ Liberal Arts/ Math

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KMTH999	9 Math	and	Critical	Reas	oning

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:

### **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:

### **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.



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# Arts-Educ/ Liberal Arts/ Math

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KMUS111	Music	Theory	<b>1</b>
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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:

## **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:

### 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.



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<b>KMUS211</b>	Music	Theory	to 7	1750	)
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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:

## 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:

## **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.



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# Arts-Educ/ Liberal Arts/ Math

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MMUJAAI	Music as a world i helioinellon	

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:

### **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:

## **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.



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# Arts-Educ/ Liberal Arts/ Math

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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:

### **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:

# **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.



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KMUS421	History	of ]	az

 $Credit\ Hours: 3\quad Contact\ Hours: 3\quad Lecture\ Hours: 3\quad Lab\ Hours: 0\quad Other\ Hours: 0$ 

See Kent State University course catalog at www.kent.edu.

## Pre-reqs:

### 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:

### **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.



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KPAS230	Black Exp	perience I
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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: 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:

### **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.



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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: 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:

### **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.



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KSOC999	Social	Sciences
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 $Credit\ Hours: 1\quad Contact\ Hours: 1\quad Lecture\ Hours: 1\quad Lab\ Hours: 0\quad Other\ Hours: 0$ 

See Kent State University course catalog at www.kent.edu.

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### **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:

### **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.



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# Arts-Educ/ Liberal Arts/ Math

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KSOC999	Social	Sciences
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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.

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#### **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-regs:

### PSC121 U.S. Government and Politics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This introductory course provides an overview of the American governmental and political systems. Topics include the history, structure, and purposes of American government; the U.S. Constitution and its evolution; the dynamics and components of the U.S. political system; and citizen participation in the system. TAG approved course- OSS011 effective Spring 2007. Ohio Transfer Module Approved effective Autumn 2008. TMSBS approved Spring 2012.

Pre-regs:



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## Arts-Educ/Liberal Arts/Math

#### **Social Sciences**

#### PSC221 State and Local Government

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the structure and processes of state governments and their relationship with the federal government, as well as the structure and processes of local governments and their relationship to state government. Emphasis will be placed on state and local government in Ohio. TAG approved - OSS014 effective Spring 2018

### Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

## PSC222 Public Policy

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores the public policy process, from issue identification through policy implementation and evaluation, in the context of specific policy areas. Topics include economic, environmental, education, health care, immigration, welfare, defense, and criminal justice policies.

#### **Pre-reqs:**

**PSC121** 

#### 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. OT36 approved TMSBS, effective summer 2022

#### Pre-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070



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## Arts-Educ/ Liberal Arts/ Math

**Social Sciences** 

#### 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. OT36 approved TMSBS, effective summer 2022

### Pre-reqs:

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

Or IDS102

Or IDS102

Or IDS102

#### 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. TAG approved OSS048 effective Spring 2011 OT36 approved TMSBS, effective summer 2022

# Pre-reqs:

**PSY121** 

#### 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.



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## Arts-Educ/Liberal Arts/Math

**Social Sciences** 

#### 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-regs:

#### **PSY131** Psychology of Personality

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides a survey of major perspectives of personality. Students will apply the scientific method as a tool in the discovery of personality description, development, and assessment. TAG apprvoed OSS018, effective summer 2020 OT36 approved TMSBS, effective summer 2022

#### **Pre-reqs:**

PSY121

## 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, prosocial behavior, interpersonal relationships, aggression and social cognition. TAG OSS016 approved Spring 2012. Ohio Transfer Module Approved Spring 2012 TMSBS.

Pre-regs:

**PSY121** 



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## Arts-Educ/ Liberal Arts/ Math

**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-regs:

PSY121

## 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: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

Or IDS102

Or IDS102



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# Arts-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** 

And PSY220

And PSY221

And PSY221

And PSY222

### 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. OT36 approved TMSBS, effective summer 2022

# Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

Or IDS102

Or IDS102



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# Arts-Educ/ Liberal Arts/ Math

**Social Sciences** 

#### 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-regs:

#### 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. TMSBS Approved effective Summer 2008. TAG approved Course-OSS023 effective Summer 2023.

**Pre-reqs:** 

### 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-regs:

SOC121



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## Arts-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

## SOC225 Diversity in American Society

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the dimensions of culture and identity through racial, ethnic, gender, sexuality, religious, and other forms of diversity within the United States. Students will use sociological theory and data to explore the dynamics of diversity, social processes, and systemic factors relating to sociocultural status and access to resources. TMSBS Approved. Effective Autumn 2008.

#### **Pre-reqs:**

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

## SOC228 Soc Structure & the Individual

 $Credit\ Hours: 3\quad Contact\ Hours: 3\quad Lecture\ Hours: 3\quad Lab\ Hours: 0\quad Other\ Hours: 0$ 

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-regs:



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## Arts-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. TAG approved OSS050, effective summer 2019

#### **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:

Or MTH124

And MTH222

SOC123

And SOC221

And SOC225

And SOC228

And SOC229

#### **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-regs:



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#### **Arts-Education and Human Serv**

#### **Education**

#### EDU131 Child Development

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on applying knowledge of the characteristics and needs of young children, prenatal to age twelve, for the creation of healthy, respectful, supportive, challenging, and effective learning environments. Multiple and interrelated influences on the development and learning of young children will be examined. Historical and contemporary theories and research that support the importance of play, environments for learning, relationships, and the role of the teacher are presented. Ten observation hours are required. TAG approved OED010 effective Spring 2019

### Pre-reqs:

Or Test & Score: ACT English - 18

Or Test & Score: Accuplacer English/Writeplacer - 5

Or Test & Score: Compass English - 070

Or Test & Score: HS English Proficiency - 3

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

ENG011

Or ENG101

Or ENG105

#### 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. ITAG approved ITECE004, effective fall 2023

# Pre-reqs:

Or Test & Score: ACT English - 18

Or Test & Score: Accuplacer English/Writeplacer - 5

Or Test & Score: Compass English - 070

Or Test & Score: HS English Proficiency - 3

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

ENG011

#### **Arts-Sciences**



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#### **Arts-Sciences**

**Biology** 

#### BIO101 INTRO TO ANAT AND PHYSIO

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course investigates basic human anatomy and physiology using a science-based approach. Students are introduced to principles of the scientific method as they explore basic chemistry, cells, tissues and the key functions of each body system.. TMNS Approved effective Autumn 2008.

### Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

#### 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 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, examination of preserved mammalian specimens, and conduction of wet labs. This is the first course in a two-semester sequence.

### Pre-reqs:

Or Test & Score: HS Biology - 2 BIO101

#### 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 in a two-semester sequence, focusing on the integration of all body systems with emphasis on the influences of the autonomic nervous and endocrine systems upon the special senses, 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 specimens. Examination of physiological processes utilizing wet labs, case studies, and other methods of instruction allow the student to compare and contrast normal physiologic mechanisms with basic pathophysiology.



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#### **Arts-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 in a two-semester sequence, focusing on the integration of all body systems with emphasis on the influences of the autonomic nervous and endocrine systems upon the special senses, 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 specimens. Examination of physiological processes utilizing wet labs, case studies, and other methods of instruction allow the student to compare and contrast normal physiologic mechanisms with basic pathophysiology.

#### Pre-regs:

BIO121

Or BIO123

### 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 Test & Score: HS Biology - 2 BIO101

#### **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 Summer 2010.

# Pre-reqs:

BIO122

Or BIO123



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**Arts-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 Spring 2011 CTAG approved course- CTMT001 effective Spring 2011

Pre-regs:

#### 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. CTAG approved CTNRM001, effective spring 2023.

Pre-regs:

### **BIO127 HUMAN BIOLOGY**

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course introduces the scientific study of the human body through basic biology, evolution, genetics, development, and a survey of the major body systems. This is a lab-based course applying hands on interactive activities to measure, record and evaluate the functions of the body systems. The course is designed for non-science majors and will guide the student in a multidisciplinary study of human life. TMNS Approved effective Autumn 2008.

Pre-regs:



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**Arts-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-regs:

#### **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-regs:

### **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-regs:



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#### **Arts-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, effective Summer 2017

Pre-reqs:

#### BIO142 GENERAL BIOLOGY II

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course explores general biological problems and processes as they are experienced by all living organisms: plant and animal diversity, evolution, basic plant and animal systems, hormones, immunology, and ecology. Specific 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 design, conduct, and report the results of a research experiment using the scientific method. TAG approved course-OSC024, Biology sequence effective Spring 2008. TAG approved OSC004, effective Summer 2017. TMNS approved-effective Summer 2016

#### BIO200 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. TMNS approved, effective Summer 2016

# Pre-reqs:

Or BIO141 BIO142



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#### **Arts-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 emphasis on medical microbiology. Content includes taxonomy, microbial growth and control, microbial genetics, principles and applications of the immune system, disease epidemiology, and the characteristics of common infectious diseases. The laboratory includes staining, aseptic culturing techniques, microbial control, selective and differential media, and diagnostic procedures. TMNS Approved effective Autumn 2008.

### Pre-reqs:

BIO122

Or BIO123

Or BIO127

Or BIO141

#### 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

Or BIO123

#### **BIO241 GENERAL GENETICS**

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course explores genetic problems and processes as they are experienced by all biological systems. The nature of genetic materials, patterns of inheritance, and pedigree analysis are examined. The structure of DNA and the molecular biology of gene function, gene expression, and gene regulation are studied. The course covers genetic variation in genomes, population genetics, evolution genetics, and explores the topics of comparative genetics, including techniques used to obtain and analyze genomic information. The course includes discussions of the bioethics of current genetic technologies. The supporting lab reinforces lecture topics and includes genetic analysis on a model organism and molecular genetic experiments utilizing the technique of polymerase chain reaction (PCR). (TMNS, Effective Summer 2013) TAG approved OSC028, effective summer 2022



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#### **Arts-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-regs:

BIO141

#### 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 Test & Score: ACT Math - 27

Or Test & Score: Accuplacer College-level Math - 085

Or Test & Score: Compass Algebra - 084

Or Test & Score: NextGen Accuplacer AAF Math - 276

Or Test & Score: SAT Mathematics - 640

MTH221

Or MTH223

#### 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 OSC025, effective spring 2018



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**Arts-Sciences** 

**Biology** 

### SCI271 Special Topics in Science I

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 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-regs:

#### SCI272 Spoecial Topics in Science II

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 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:

### SCI273 Special Topics in Science III

Credit Hours: 3 Contact Hours: 6 Lecture Hours: 0 Lab Hours: 6 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:** 

Chemistry



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#### **Arts-Sciences**

### Chemistry

#### CHM100 Exploring Science & Technology

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course is designed for non-science majors and intended to develop an understanding of basic chemistry concepts and applications important to technology and society. Topics include air and water quality, the chemistry of global climate change, petroleum and natural gas, acid rain, polymers, fuel cells, drugs, nutrition, and genetic engineering. Laboratory experiments and research projects will reinforce cooperative learning, the utilization of the scientific method, problem-solving skills, and critical thinking skills. OT36 (TMNS and TMNSVDL) approved, effective spring 2022

### Pre-reqs:

#### **CHM101** Introduction 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.

- Or Test & Score: ACT Math 19
- Or Test & Score: Accuplacer College-level Math 040
- Or Test & Score: Accuplacer Elementary Algebra 097
- Or Test & Score: HS Chemistry 2
- Or Test & Score: Compass Algebra 052
- Or Test & Score: GED Mathematical Reasoning 1
- Or Test & Score: M022 Transfer Prof/Placement 3
- Or Test & Score: M023 Transfer Prof/Placement 3
- Or Test & Score: HS Math and Multiple Measures 3
- Or Test & Score: NextGen Accuplacer AAF Math 237
- Or Test & Score: NextGen Accuplacer QAS Math 250
- Or Test & Score: SAT Mathematics 510
- Or MTH020B
  - MTH022
- Or MTH023
- Or MTH105
- Or MTH105S
- Or MTH107 Or MTH107S



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#### **Arts-Sciences**

Chemistry

#### CHM105 Intro to Forensic Science

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to introduce students to the study of forensic science and crime scene investigation. It will cover basic general chemistry and biochemistry topics with an emphasis of applying the scientific method to investigating crime. The class will follow evidence from the time it is discovered at a crime scene until it is involved in a court case. Students will learn forensic methods required to assess, test and present evidence. The laboratory experiments presented are designed to teach critical thinking and laboratory skills necessary to ensure safety and protect crucial evidence. TMNSVDL approved, effective summer 2021.

Pre-regs:

#### 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:

Or Test & Score: HS Chemistry - 2 CHM101

#### 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



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#### **Arts-Sciences**

#### Chemistry

#### CHM123 Gen Organic & Biological Chem

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 Other Hours: 0

This course is a survey of fundamental concepts in general, organic, and biological chemistry. The concepts are introduced to emphasize the application of chemistry in the health and applied technology fields. Topics include measurement, chemical bonding and compounds, energy changes, gas laws, solutions, acids and bases, polymers, nuclear chemistry, organic, and biological chemistry. The structures and reactions of organic compounds are detailed to expand the understanding of the chemistry of hydrocarbons, functional groups, lipids, carbohydrates, nucleic acids, vitamins, proteins, and metabolism. Laboratory experiments reinforce hands-on experience, the scientific method, problem-solving skills, and critical thinking skills. OT36 approved TMNS, effective summer 2022

### Pre-reqs:

Or Test & Score: ACT Math - 22

Or Test & Score: Accuplacer College-level Math - 055

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: HS Chemistry - 2

Or Test & Score: Compass Algebra - 039

Or Test & Score: M024 Transfer Prof/Placement - 3

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer AAF Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 263

Or Test & Score: SAT Mathematics - 530

Or CHM101

MTH024

Or MTH025

Or MTH105

Or MTH107

#### CHM141 General Chemistry I

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

An introduction to the fundamental principles of chemistry, including measurement and calculation, chemical stoichiometry, the properties of gases, atomic and molecular structure, bonding, thermochemistry, and periodic properties. OSC023 sequence & OSC008, effective Summer 2017 OT36-TMNS, effective summer 2023

# Pre-reqs:

Or Test & Score: ACT Math - 22

Or Test & Score: Accuplacer College-level Math - 055

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: HS Chemistry - 2

Or Test & Score: Compass Algebra - 039



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#### **Arts-Sciences**

### Chemistry

#### CHM141 General Chemistry I

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

An introduction to the fundamental principles of chemistry, including measurement and calculation, chemical stoichiometry, the properties of gases, atomic and molecular structure, bonding, thermochemistry, and periodic properties. OSC023 sequence & OSC008, effective Summer 2017 OT36-TMNS, effective summer 2023

### Pre-reqs:

Or Test & Score: M024 Transfer Prof/Placement - 3

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer AAF Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 263

Or Test & Score: SAT Mathematics - 530

CHM101

Or MTH024

Or MTH025

Or MTH124S

Or MTH125S

### CHM141A GENERAL CHEMISTRY I A

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

An introduction to the fundamental principles of chemistry, including measurement and calculation, chemical stoichiometry, atomic and molecular structure, bonding, thermochemistry and periodic properties.

# Pre-reqs:

Or Test & Score: HS Chemistry - 2 CHM101



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#### **Arts-Sciences**

Chemistry

#### CHM141B GENERAL CHEMISTRY I B

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

A continuation of the study of the fundamental principles of chemistry, including chemical stoichiometry, the properties of gases, atomic and molecular structure, bonding and periodic properties.

#### Pre-regs:

CHM141A

## CHM142 General Chemistry II

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 4 Other Hours: 0

A continuation of the study of the principles of chemistry, including solution properties, acids and bases, chemical equilibrium, thermodynamics, reaction kinetics, organic chemistry, and electrochemistry. This course is Ohio TAG approved. OSC024 sequence & OSC009, effective Summer 2017. OT36-TMNS, effective summer 2023

#### **Pre-reqs:**

CHM141

Or CHM141A

And CHM141B

#### CHM205 Forensic Chemistry

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course introduces students to the techniques of forensic chemistry, particularly as they relate to crime scene investigation and ongoing analysis of evidence obtained after a crime is committed. The course is an integrated study of forensic science in the areas of chemistry, toxicology, and trace analysis. The topics include but are not limited to drugs, poisons, colorants, paints, polymers, and ink. Chemistry and biochemistry concepts will be used in the forensic analysis of materials and in the chemical analysis of evidence using qualitative and quantitative analysis. The laboratory experiments in the course are designed to help students gain experience in the use of current analytical methods that are used to analyze evidence during criminal investigations. In addition to the qualitative analytical techniques, the course will explore how instrumental analysis can be used to determine the identity of a drug or poison. TMNS approved-effective Summer 2016

#### Pre-regs:

CHM105

Or CHM123

Or CHM141



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#### **Arts-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 approved Summer 2018.

#### Pre-regs:

CHM142

#### 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 approved Summer 2018.

#### Pre-regs:

CHM241

## 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-regs:

CHM123

Or CHM141

#### **Physics**



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#### **Arts-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. OT36 (TMNS and TMNSVDL) approved, effective spring 2022

### Pre-reqs:

- Or Test & Score: ACT Math 22
- Or Test & Score: ACT Reading 18
- Or Test & Score: Accuplacer College-level Math 055
- Or Test & Score: Accuplacer Elementary Algebra 108
- Or Test & Score: Accuplacer Reading 070
- Or Test & Score: Compass Algebra 052
- Or Test & Score: Compass Reading 080
- Or Test & Score: GED Mathematical Reasoning 1
- Or Test & Score: GED Reasoning Through Lang Art 1
- Or Test & Score: IDS Transfer Prof/Placement 3
- Or Test & Score: M024 Transfer Prof/Placement 3
- Or Test & Score: M025 Transfer Prof/Placement 3
- Or Test & Score: HS Math and Multiple Measures 3
- Or Test & Score: NextGen Accuplacer AAF Math 250
- Or Test & Score: NextGen Accuplacer Reading 246
- Or Test & Score: NextGen Accuplacer QAS Math 263
- Or Test & Score: Reading Proficiency 3
- Or Test & Score: SAT Mathematics 530

#### And IDS102

MTH024

- Or MTH025
- Or MTH105
- Or MTH105S
- Or MTH107
- Or MTH107S
- Or MTH124S
- Or MTH125S



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#### **Arts-Sciences**

**Physics** 

#### PHY105 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-regs:

#### 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. OT36 approved, effective summer 2022, TMNS

#### **Pre-reqs:**

Or Test & Score: ACT Math - 27

Or Test & Score: Accuplacer College-level Math - 085

Or Test & Score: Compass Algebra - 084

Or Test & Score: NextGen Accuplacer AAF Math - 276

Or Test & Score: SAT Mathematics - 640

Or MTH125

Or MTH125B

And MTH130

And MTH130

MTH135

Or MTH135B



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#### **Arts-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 Test & Score: ACT Math - 27

Or Test & Score: Accuplacer College-level Math - 085

Or Test & Score: Compass Algebra - 084

Or Test & Score: NextGen Accuplacer AAF Math - 276

Or Test & Score: SAT Mathematics - 640

Or MTH125

Or MTH125B

And MTH130

And MTH130

MTH135

Or MTH135B

### PHY121B COL PHYSIC I BW 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-regs:

**PHY121A** 



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#### **Arts-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 physical theories using measured data.

### Pre-reqs:

**PHY121** 

Or PHY121A

And PHY121B

### 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-regs:

MTH223

And MTH224

Can be Taken Concurrently

## 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

And MTH225

Can be Taken Concurrently

PHY221

### **Business-Engineering Tech**

**Automotive** 



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## **Business-Engineering Tech**

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ETD202	FNC	INDED	STUDY
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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-regs:

#### 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**

## ABC110 Electrical Applications I

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course will cover the creation and analysis of practical applications of lighting, load calculations for branch and feeder circuits, hazardous locations, and commercial electric service applications.



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## **Business-Engineering Tech**

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ABC120	Electrical	<b>Applications</b>	II
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Credit Hours: 5 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

This course covers the creation and analysis of practical applications for healthcare facilities, standby and emergency systems, fire alarm systems, heat tracing and freeze protection, and fundamentals of crew leadership.

Pre-regs:

#### **AIT139** Introduction to Robotics

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Basic terminology, theory and application of robotics, including: selection, construction, classification, operating characteristics and safety. Emphasis is given to industrial examples in stand-alone and work cell applications.

**Pre-reqs:** 

### 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. CTCON003, effective spring 2016.



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## **Business-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-regs:

#### 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-regs:

And CET121

Can be Taken Concurrently

CET122

#### 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

Or MTH125A

And MTH125B



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## **Business-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-regs:

And MET124

MTH125

Or MTH125B

Or MTH135

Or MTH135B

### 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

And DET125

## 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-regs:

And CET121

MTH125

Or MTH125B

Or MTH135



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## **Business-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-regs:

Or MTH135B

#### 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** 

Can be Taken Concurrently

### 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-regs:

**CET223** 



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## **Business-Engineering Tech**

### **Engineering**

#### 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

#### 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-regs:

Or Test & Score: ACT Math - 22

Or Test & Score: Accuplacer College-level Math - 055

Or Test & Score: Accuplacer Elementary Algebra - 108

Or Test & Score: Compass Algebra - 052

Or Test & Score: Computer Test - 21

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: HS Math and Multiple Measures - 3

Or Test & Score: NextGen Accuplacer AAF Math - 250

Or Test & Score: NextGen Accuplacer QAS Math - 263

And CET121

And CET122

Or CET237

Or DET125

And ITD100

Or MTH025

Or MTH094

MTH123



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## **Business-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

Or MTH125B

Or MTH135

Or MTH135B

#### 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** 

## 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



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## **Business-Engineering Tech**

**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-regs:

#### 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:**

And CET122

Or CET124

CET227

Can be Taken Concurrently

Or DET125

#### 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** 

And CET123

Can be Taken Concurrently



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## **Business-Engineering Tech**

**Engineering** 

#### CET234 Architect CAD (Revit 3D-BIM)

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

In this course, students will review architectural working drawings while covering the basic principles of Building Information Modeling (BIM) through the use of Revit Architecture CAD software. Students will be introduced to the tools of Revit Architecture CAD and parametric modeling. The fundamental concepts covered in this course include: user interface, parameters, families, walls, roof openings, rendering, and printing. Students will produce a variety of architectural working drawings utilizing Revit Architecture CAD software.

### Pre-reqs:

**CET121** 

And CET122

## 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 Test & Score: Computer Test - 21

**CET121** 

And ITD100

#### 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** 



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## **Business-Engineering Tech**

**Engineering** 

#### CET237 INTERPRETING CONSTRUCTION DOC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 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. effective Fall 2016: CTCON001

Pre-regs:

### 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

Or CET228

#### CET239 BUILDING CODE APPLICATIONS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 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

And CET237



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## **Business-Engineering Tech**

**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. CTAG approved effective fall 2019: CTEGT002

Pre-regs:

#### **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** 

### **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-regs:

**DET121** 

And DET125

Can be Taken Concurrently



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## **Business-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 Fall 2019.

Pre-regs:

#### **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** 

### DET131 Pro/ENG (Creo Parametric)

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:

**DET125** 



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## **Business-Engineering Tech**

**Engineering** 

#### DET132 SolidWorks 3D Print/Scan

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to introduce the student to SolidWorks, a parametric feature-based solid modeling program. SolidWorks is used for the design of parts, assemblies and engineering drawings. The student will design actual mechanical components, and the areas of concentration include: basic program syntax, design intent, top down and bottom up design, and parametric relations. Many parts and assemblies will be developed. Engineering drawings, solid models, and 3D prints will be created. 3D prints also will be generated from 3D-scanned parts.

#### Pre-regs:

**DET125** 

#### 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** 

Or PHY121B

#### 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** 



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## **Business-Engineering Tech**

**Engineering** 

### DET230 AutCAD Invent 3D Prt/Scan

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. 3D prints will be created. 3D prints also will be generated from 3D-scanned parts.

#### Pre-regs:

**DET125** 

#### 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** 

And DET125

#### 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
Or	MTH125B	Can be Taken Concurrently
Or	MTH135	Can be Taken Concurrently
Or	MTH135B	Can be Taken Concurrently



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## **Business-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-regs:

**EET120** 

Or MTH130 Can be Taken Concurrently
And MTH135 Can be Taken Concurrently
Or MTH135B Can be Taken Concurrently

#### 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** 

And EET122 Can be Taken Concurrently

### 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-regs:

EET120



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## **Business-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

#### 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** 

## 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-regs:

**PHY121** 

Or PHY121B

Or PHY122



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## **Business-Engineering Tech**

**Engineering** 

#### EET135 Semiconductor 101

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course introduces students to the concepts and applications of the semiconductor industry and cleanroom environment, semiconductor materials science and processes in the development of semiconductor devices. The student will explore career opportunities within the semiconductor industry and learn how people effectively work in a cleanroom environment and adhere to chemical safety best practices. Students will be introduced to how semiconductor wafers are manufactured and processed to become an integrated circuit used in a variety of industries. Students will demonstrate problem-solving, critical thinking and communication skills while learning how the microelectronic manufacturing environment focuses on punctual delivery of products and tasks, according to the Standard Operating Procedure (SOP)/checklist.

Pre-regs:

#### **EET136** Introduction to Vacuum Systems

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will introduce students to the operational mechanisms and process use of vacuum pumps used in the semiconductor industry. Description of operational methodology and process use of equipment that requires vacuum pumps used in the semiconductor industry. Students will practice the ability to safely test, troubleshoot, and fix a vacuum pump system with a leak using tools while gowned up in a cleanroom environment.

**Pre-reqs:** 

## **EET137** Intro to Manufacturing

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will introduce students to print reading and part visualization from drawings, including analyzing and interpreting multi-view drawings and three-dimensional models, location of key features and dimensioning specifications. Students are introduced to beginning concepts in geometric dimensioning and tolerancing. Instruction in using precision measurement tools including, but not limited to scales, calipers, micrometers, dial indicators, and coordinate measurement machines. Students will incorporate the use of computer interfaces in metrology and basic statistical process control and topics in lean manufacturing.

Pre-reqs:



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## **Business-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-regs:

#### 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-regs:

## 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. TAG approved Summer 2017 OET022

#### **Pre-reqs:**

**EET120** 

Or EST130

Or EST230



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## **Business-Engineering Tech**

**Engineering** 

#### 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** 

## **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** 

## **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-regs:

**EET123** 

And EET227



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## **Business-Engineering Tech**

**Engineering** 

### EET233 Tech Proj-Electrical/Electroni

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/electronic program. The student will choose an approved project compatible with interest and background. The project must be in the area of electrical and/or electronic engineering technology. The scope will be determined by the project, but in general, will include research, testing, drawing, actual construction, and a report and presentation.

	Pre-req	S	:
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**EET123** 

And EET227

#### **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-regs:

### 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:** 



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## **Business-Engineering Tech**

**Engineering** 

#### MET123 MATERIAL SCIENCE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 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-regs:

#### MET124 STATICS/STR OF MATERIALS

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 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

Or PHY121B

Or PHY221 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** 



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## **Business-Engineering Tech**

**Engineering** 

### 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** 

#### 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** 

## **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 CTMET004, effective fall 2019.



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## **Business-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-regs:

DET125 Can be Taken Concurrently
And MET228 Can be Taken Concurrently

#### 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** 

Or PHY121B

## 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** 



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## **Business-Engineering Tech**

**Engineering** 

#### MST126 PIPEFITTING PRINC AND APPLIC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 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-regs:

#### **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-regs:

## 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.



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## **Business-Engineering Tech**

**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-regs:

### **Engineering/Applied**

## **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 microhydroelectric 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-regs:

#### AIT101 Basic Machines

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is intended to develop the student's engineering aptitude. Subject matter will reveal how the tools of antiquity continue to inspire modern industrial design. The course covers basic theory, from the lever and inclined plane to the principles of the internal combustion engine and power transmissions. Upon completion of this course, students will be able to explain how the application of simple machines is related to work efficiency. Students will also be able demonstrate how basic machine components are integrated into present-day applications.



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## **Business-Engineering Tech**

**Engineering/Applied** 

#### **AIT103** Non-Destructive Testing

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course provides students an introduction to non-destructive evaluation methods that are used in the evaluation of materials. This includes understanding principles of various non-destructive testing methods, fundamentals, and discontinuities. Students will be introduced to relevant quality assurance and quality control testing requirements in accordance with ASQ, ASME, and ANSI standards.

Pre-reqs:

### AIT121 Indust Internet of Things

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Industrial Internet of Things or IIoT is a phrase that applies to the union of smart technologies into the manufacturing and industrial infrastructure to improve efficiency at all levels. This course provides fundamental knowledge of the technologies and strategies used in a smart manufacturing environment. Knowledge and understanding of the technologies are reinforced through a set of hands-on laboratory exercises.

**Pre-reqs:** 

### AIT122 MACHINE TOOLS

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course will cover basic machine operations used in machining industries. Topics include safety, basic machine functions, inspection processes, precision measuring tools, layout procedures, cutting tools, proper machine settings and various machine setups to accomplish laboratory projects. The student will be introduced to soft skills necessary to function in a team environment with a general focus on team building, team problem solving and team decision making.



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## **Business-Engineering Tech**

**Engineering/Applied** 

#### AIT123 ADVANCED MACHINE TOOLS

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course will cover advanced machine operations used in the area of machining industries. Topics include safety, advanced machine functions, inspection processes, precision measuring tools, layout procedures, cutting tools, proper machine settings and various machine setups to accomplish laboratory projects. The student will apply soft skills necessary to function in a team environment with a general focus on team building, team problem solving and team decision making.

Pre-regs:

**AIT122** 

#### 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:** 

### 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.



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## **Business-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-regs:

#### 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-regs:

### 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:** 



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## **Business-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-regs:

**AIT122** 

## AIT134 PREVENT/PREDICT MTCE

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is designed to familiarize the student with preventive maintenance practices which includes the regular inspection, lubrication, testing, adjustment, and analysis of equipment. Included is the framework for all planned maintenance activity to correct potential problems identified by inspection resulting in optimized equipment performance and life. An introduction to predictive maintenance practices will be covered.

#### Pre-regs:

And MST125

MST221

#### 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:** 



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## **Business-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-regs:

**AIT122** 

Or ARL129

And IET223

#### 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-regs:

#### AIT220 Industrial Robotics

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course will provide knowledge and skills to setup and program an industrial grade robot. The student will use a FANUC robot and simulation software to acquire hands on experience working with programming software, troubleshooting, and to perform a complete system setup.



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## **Business-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 advanced features of machining and turning center operations including programming, editing, proper installation and removal of cutting tools, safety and actual running of equipment both manually and in programmed modes. The student will apply soft skills necessary to function in a team environment with a general focus on team building, team problem solving and team decision making.

### Pre-reqs:

Or ARL121

Or ARL122

IET223

#### 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:

AIT220

#### AIT228 Automated Weld & Fabrication

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course is designed to provide students with an introduction to programed cutting and robotic welding operations of material fabrications. The student will be required to produce a number of acceptable projects from standard blueprints and instructor guidelines using metalworkers, plasma cutters and programmable welders. Students will learn to safely operate robots, create cutting paths and programs, employ setup part fixtures, edit programs to minimize cycle times, and operate the cell in a safe, programmed automated mode.

### Pre-reqs:

AIT220

And MST127



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## **Business-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-regs:

#### 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:** 

## 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:** 



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## **Business-Engineering Tech**

**Engineering/Applied** 

#### ARL124 BASIC METROLOGY

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 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-regs:

#### ARL125 METALLURGICAL INSPECTION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 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-regs:

### 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.



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# **Business-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-regs:

#### ARL129 FUNDAMENTAL OF CNC OPERATIONS

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 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:** 

### 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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

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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-regs:

## 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:** 

### 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.



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# **Business-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-regs:

#### 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:** 

### 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.



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# **Business-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-regs:

#### 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:** 

### 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 hydrotesting. They will learn how to execute the test process and then close out a test with final documentation.



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# **Business-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-regs:

#### 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:** 

### 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).



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# **Business-Engineering Tech**

**Engineering/Applied** 

#### 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-regs:

#### ARL223 MFG CELL LDSHP AND COMMUNIC

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 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:** 

### 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.



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# **Business-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-regs:

#### 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:** 

### 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.



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# **Business-Engineering Tech**

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### 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-regs:

### 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:** 

### 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-regs:

ARL142



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# **Business-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

#### 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

## 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-regs:

ARL145



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# **Business-Engineering Tech**

**Engineering/Applied** 

#### 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-regs:

#### ARL240 Ariel Technical Doc

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is intended to develop the understanding of proper execution of written, visual, and verbal processes of technical communication in business and industry. Students will differentiate between effective and ineffective technical communication.

**Pre-reqs:** 

### ARL241 Solid Edge

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide the student with the skillset to use Edge software as their primary tool for design and revision of mechanical components. This course will build on part assembly and draft workflows as they assist in the development of machining programs.



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# **Business-Engineering Tech**

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#### ARL242 Multiple Axis Programming

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide the skills required to program, set up, and operate multiple-axis CNC machines. Students will learn about multi-axis machining fundamentals such as dynamic work offsets, tool center point control, inverse feed time, and machine rotary zero point offsets.

Pre-regs:

#### ARL243 CNC Fixtures, Macros, & Probes

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will provide the skills required to use wireless probes, fixtures, and macros in a programming system for part setup, tool setting, and various inspection routines. Students will incorporate these tools into machining programs to check for dimensional conformity, update work offsets, and output data for recording purposes.

Pre-regs:

## CDL121 CDL-CLASS A-SAFE OPER & CONTRO

Credit Hours: 6 Contact Hours: 6 Lecture Hours: 6 Lab Hours: 0 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).



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**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, pre-trip, 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, meet minimum Department of Transportation (DOT) medical and vision standards, and pass 5-Panel 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) at their own cost.

Pre-reqs:

CDL121 Can be Taken Concurrently

#### **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.

Pre-regs:

### 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.



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#### 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-regs:

#### 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:** 

### 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.



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# **Business-Engineering Tech**

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# 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-regs:

#### 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:** 

## **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.



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# **Business-Engineering Tech**

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#### 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-regs:

#### **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-regs:

### **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.



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#### 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-regs:

#### **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-regs:

## **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.



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### **Business-Engineering Tech**

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#### **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-regs:

## 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:** 

## **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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

ENV142	BASIC WATER	TRMT-I	FILTR	ATION
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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-regs:

#### **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:** 

### 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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

ENV145 E	BASIC WATER	TREATMENT-	QUALITY
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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-regs:

#### **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:** 

### 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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

ENV148	WATED	DISTRTN	CVC	DICTDID	EAC
CINV140	WAICK	DISTRIN	212	-DI3 I KID	ГAU

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% webbased course.

Pre-regs:

#### **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:** 

### **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 course is enhanced with audio, up-to-date photographs, interactive exercises, and online links. This is a 100% web-based course.



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# **Business-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-regs:

#### 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:** 

### 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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

ENV154	WATED	DISTRIBTN	CVC_WATD	MAINC
C.IV V I 34	WAILK	DISTRIBLE	313-WAIR	WAINS

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-regs:

## 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:** 

### **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.



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# **Business-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-regs:

#### 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:** 

### **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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

ENV160	WASTEWATER	TOTMT DDEI	IMW TOTMT
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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-regs:

#### 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:** 

### **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.



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# **Business-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-regs:

#### **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-regs:

#### **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.



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# **Business-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 regulation property successful completion of the course and a comprehensive final exam.

#### **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.

Pre-regs:

#### 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.



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### **Business-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

Or CHM121B

Or CHM141

Or CHM141B

And MTH107

## 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

#### 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-regs:

**ENV121** 



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# **Business-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.

Pre-regs:

#### 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.

**Pre-reqs:** 

### **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 the provided to the student



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# **Business-Engineering Tech**

**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.

ENV232

#### 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

And ENV121

And ENV221

Or ITD122

### EST129 SWITCHGEAR, TRANS, CONTROLS

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 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-regs:**

**EET122** 

Or EST130

Or EST230



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# **Business-Engineering Tech**

**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:

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M094 Transfer Prof/Placement - 2

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

MTH101

#### 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" semiconductor testing and pulse circuit troubleshooting.

### Pre-reqs:

**EET123** 

#### **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.



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# **Business-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** 

Or EST130

Or EST230

#### **EST230** Electrical Circuits & Devices

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course is to provide a general understanding of electricity and the operation of electrical devices; to be able to make electrical measurements and basic calculations involving voltage, current, resistance, reactance, capacitance, and power; and to learn how to supply power to commercial equipment.

#### Pre-regs:

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: M094 Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

Or MTH025

Or MTH094

Or MTH107

MTH123



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# **Business-Engineering Tech**

**Engineering/Applied** 

EST235 Powe	er Gener &	& Gric	l Tech
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Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course encompasses power generation from creation from multiple sources (coal, nuclear, turbine, fuel cell, etc.) and various distribution technologies until it enters the home or business. Students will learn the technology of local and national transmission and distribution systems as well as bulk generation, distributed generation, microgrid and smartgrid technologies. Energy efficiency, storage, cogeneration and energy security will be studied and analyzed during this course.

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EST230

#### ETD225 SPECIAL TOPICS

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

Special topics in Engineering, Industrial, and Emerging Technologies Division.

#### Pre-regs:

### 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.



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	ETD226A	Special	<b>Topics</b>
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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:

## **ETD226B 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:

## **ETD226C 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.



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# **Business-Engineering Tech**

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ETD226D	Specia	ıl Topics
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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:

## **ETD226E 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:

### ETD227 SPECIAL TOPICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0 Special topics in Engineering, Industrial, and Emerging Technologies Division.



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# **Business-Engineering Tech**

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ETD227A Special Topics
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Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0 Special topics in Engineering, Industrial, and Emerging Technologies Division.

### Pre-reqs:

### ETD228 SPECIAL TOPICS

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0 Special topics in Engineering, Industrial, and Emerging Technologies Division.

### Pre-reqs:

### 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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

#### EUT121 OVERHEAD LINE TECHNOLOGY I

Credit Hours: 5 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 18 Other Hours: 0

Supervised practical applications of electrical overhead line worker job duties in a directed practice setting under direct supervision of FirstEnergy personnel. Emphasis on skills to safely climb wood poles, the operation of a line truck, setting poles, framing poles on the ground, and operation of a digger derrick. Student will receive instruction to pass the Class "A" Commercial Driver's License skills test. Rigging, wire identification, and use of rubber goods will also be learned. Safety topics include: Rigging Safety Awareness; Fall Protection; Flame Retardant Personal Protective Equipment; Medic First Aid; Blood-Borne Pathogens; and good housekeeping.

Pre-regs:

#### **EUT122 OVERHEAD LINE TECHNOLOGY II**

Credit Hours: 5 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 18 Other Hours: 0

Supervised practical applications of electrical overhead line worker job duties in a directed practice setting under direct supervision of FirstEnergy personnel. Emphasis on skills required to perform work on secondary voltage circuits. Emphasis on the installation of services, street lighting, and secondary circuits, bucket truck familiarization and bucket rescue. Overview of distribution electrical systems, and Occupational Safety and Health Administration (OSHA) rules are also included. Safety topics include: Work Zone Traffic Control; Minimum Approach Distances; Rubber Protective Equipment; and knowledge of UD Excavation/Trenching/Shoring.

#### Pre-regs:

**EUT121** 

## **EUT123 SUBSTATION TECHNOLOGY I**

Credit Hours: 5 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 18 Other Hours: 0

Supervised practical applications of substation worker job duties in a directed practice setting under direct supervision of FirstEnergy personnel. This course provides the student with the basic knowledge and skills necessary to assist with the performance of maintenance and testing in substations and switchyards.



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## **Business-Engineering Tech**

**Engineering/Applied** 

### **EUT124 SUBSTATION TECHNOLOGY II**

Credit Hours: 5 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 18 Other Hours: 0

Supervised practical applications of substation worker job duties in a directed practice setting under direct supervision of FirstEnergy personnel. This course provides the student with a broader skill set as well as the enhanced knowledge and skill level necessary to safely assist in the performance of routine repairs on distribution and power transformers, bushings, circuit breakers, disconnect switches, control equipment and other de-energized electrical equipment used in the distribution of electrical energy.

### Pre-regs:

**EUT123** 

#### EUT221 OVERHEAD LINE TECHNOLOGY III

Credit Hours: 5 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 18 Other Hours: 0

Supervised practical applications of electrical overhead line worker job duties in a directed practice setting under direct supervision of FirstEnergy personnel. Emphasis on skills required to identify, install, and maintain primary underground residential distribution (URD) equipment, including various methods of troubleshooting URD primary and secondary circuits. Grounding distribution circuits will also be learned. Students will develop the knowledge and skill to safely perform rubber gloving assignments utilizing the insulate and isolate techniques and will perform various tasks while working on an energized three-phase circuit under controlled conditions. Safety topics include: fire extinguisher safety, temporary protective grounds, stored energy devices, and utilities protective service.

#### Pre-regs:

**EUT122** 

## **EUT222 OVERHEAD LINE TECHNOLOGY IV**

Credit Hours: 5 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 18 Other Hours: 0

Supervised practical applications of electrical overhead line worker job duties in a directed practice setting under direct supervision of FirstEnergy personnel. Emphasis on line equipment, hot line tools, power industrial trucks, and transmission (including wood pole, steel pole, ladder, and tower climbing). Bucket, pole top, and self-rescue will also be reviewed. Safety topics include: spill response, live Line tools, hazardous communications, and Accident Prevention Handbook review.

#### **Pre-reqs:**

**EUT221** 



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# **Business-Engineering Tech**

**Engineering/Applied** 

### EUT224 SUBSTATION TECHNOLOGY III

Credit Hours: 5 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 18 Other Hours: 0

Supervised practical applications of electrical substation worker job duties in a directed practice setting under direct supervision of FirstEnergy personnel. This course provides the student with the advanced knowledge and skills necessary to safely work in a supervised capacity on energized equipment and in an unsupervised capacity on de-energized equipment employed in the production and distribution of electrical energy. This course also introduces the student to power transformer testing, troubleshooting, alarm systems, circuit breaker troubleshooting, reclosers and sectionalizers, oil circuit breaker maintenance and voltage regulators.

### Pre-regs:

**EUT124** 

#### EUT225 SUBSTATION TECHNOLOGY IV

Credit Hours: 5 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 18 Other Hours: 0

Supervised practical applications of electrical substation worker job duties in a directed practice setting under direct supervision of FirstEnergy personnel. This course provides the student with the knowledge and skills to work safely and competently in a supervised or unsupervised capacity. This course is the culmination of prior courses with the introduction of advanced knowledge and skills related to motor operated air brake switch, electronic recloser controls, SF6 gas breakers, air circuit breaker maintenance, oil circuit breaker timing and travel tests, calibration of various substation equipment, potential transformer testing, phasing, switching procedures and the performance of energized primary work. The work activities in this final semester will be performed in a crew setting and will require continuous team work with fellow students.

Pre-regs:

EUT224

### **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:



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# **Business-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.

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HVC121

Can be Taken Concurrently

## **HVC125** Sheet Metal Layout & Fabric

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 2 Other Hours: 0

This course covers the layout of basic sheet metal duct fittings using geometrical methods and the fabrication of fittings using industry accepted joining methods. Topics include layout and fabrication of rectangular, round, and transition fittings in straight, curved, and offset configurations, as well as design impacts on airflow efficiency in various types of fittings.

Pre-regs:

## **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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

### 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

#### 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

# 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-regs:

HVC122



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## **Business-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-regs:

HVC122

Can be Taken Concurrently

### 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:**

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M094 Transfer Prof/Placement - 2

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

MTH101

#### 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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

HVC229	ΛID	CONDITNING	DEEDIC	CVCIE
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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-regs:

## 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:** 

## 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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

## HVC232 Hydronic Apps and Design

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Hydronic system application and design including steam and hot water systems using fan coils, radiator, baseboard, and radiant panel terminations are presented. Residential, commercial, and industrial applications are covered.

### Pre-regs:

HVC122

#### 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-regs:

HVC222

## 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:** 



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# **Business-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

### 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

## 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-regs:

HVC122



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# **Business-Engineering Tech**

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### 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

#### 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-regs:

# IET223 COMPUTER NUMERICAL CTRL

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course will cover basic features of machining and turning center operations including programming, editing, proper installation and removal of cutting tools, safety and actual running of equipment both manually and in programmed modes. The student will be introduced to soft skills necessary to function in a team environment with a general focus on team building, team problem solving and team decision making. CTAG CTMET006 approved, effective fall 2019



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# **Business-Engineering Tech**

**Engineering/Applied** 

### IET270 DIM METROLOGY AND INSPECT I

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.

## Pre-regs:

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M025 Transfer Prof/Placement - 3

Or Test & Score: M094 Transfer Prof/Placement - 2

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

Or MTH025

MTH094

Or MTH107

## 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. Types of prints covered include but not limited to industrial, structural, civil, sheet metal, building, piping, hydraulic, welding, and electrical.

Pre-reqs:



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# **Business-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:

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

And MST123 Can be Taken Concurrently

MTH101

#### 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-regs:

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

And MST122

Can be Taken Concurrently

MTH101



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# **Business-Engineering Tech**

**Engineering/Applied** 

### 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-regs:

#### MST127 PRINCIPLES OF WELDING

Credit Hours: 6 Contact Hours: 9 Lecture Hours: 3 Lab Hours: 6 Other Hours: 0

This course will introduce the student to basic principles of welding which include preparation, cutting, and joining similar and dissimilar metals. Oxygen/acetylene and AC/DC electric are the major techniques used with other processes discussed. Safe working procedures will be reviewed and followed. Lab practice will consist of arc, MIG, TIG, and gas welding, along with layout and cutting processes.

**Pre-reqs:** 

## 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-regs:

EST128



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# **Business-Engineering Tech**

**Engineering/Applied** 

### MST134 HYDRAULIC AND PNEUMATIC SYS

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 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. CTAG approved CTAIE002, effective fall 2023 ITAG approved ITAIE002, effective fall 2023

## Pre-reqs:

Or Test & Score: ACT Math - 19

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer College-level Math - 040

Or Test & Score: Accuplacer Elementary Algebra - 097

Or Test & Score: Compass Algebra - 039

Or Test & Score: GED Mathematical Reasoning - 1

Or Test & Score: M022 Transfer Prof/Placement - 3

Or Test & Score: M023 Transfer Prof/Placement - 3

Or Test & Score: M092 Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer AAF Math - 237

Or Test & Score: NextGen Accuplacer QAS Math - 250

Or Test & Score: SAT Mathematics - 510

Or MTH022

Or MTH023

MTH092

#### 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.



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# **Business-Engineering Tech**

**Engineering/Applied** 

### MST136 3G & 4G Weld Cert Exam Prep

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course covers the fitment and joining of steel plates vertically, 3G and overhead, 4G using SMAW and GMAW processes. Specific topics include welding defects and their causes, the Heat Affected Zone and the Fusion Zone. Students will be introduced to and perform various destructive tests per the American Welding Society (AWS) D1.1 Code. Welding of roots, filler passes, and cover passes is also included. In addition, students may take the AWS certification exams for an additional fee. ITAG approved ITWLD001, effective fall 2023

## Pre-reqs:

MST127

#### MST137 6G WLDG CERT EXAM PREP

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 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:**

MST136

## MST138 PREP GAS TUNGSTEN ARC WLDG

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 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-regs:

MST127



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## **Business-Engineering Tech**

**Engineering/Applied** 

### MST139 Gas Tungsten Arc Welding

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course encompasses the principles, procedures, and operation of equipment to properly and safely demonstrate gas tungsten arc welding (GTAW) processes. Emphasis is placed on producing welds on a variety of material thicknesses, various positions/directions of welds, proper set-up/finishing procedures, and weld bead geometry. Students will use both direct current electrode negative (DCEN) and alternating current (AC) styles.

## Pre-reqs:

MST138

#### 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:** 

## 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.



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# **Business-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-regs:

#### 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-regs:

And MST127

MST128

### 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



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# **Business-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

And MST128

#### PET230 Petrol Measure Capstone

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students will be tasked to optimize uptime, production, and take-away capacity of a simulated and/or functioning well pad. Pad and tank battery operations such as influent and effluent totalizing, fluid level monitoring, temperature control, separator efficiency, and logistics management will be used to integrate and apply the skills and knowledge developed throughout the program. Learners taking this course will work independently, in teams, and in varying roles.

# Pre-reqs:

PET102

And PET131

And PET135

And PET141 Can be Taken Concurrently

And PET210 Can be Taken Concurrently

## **General Engineering**

#### BTA100 Core Skills 1

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

In this course, students learn basic use and care of tools, pipe fitting materials and core supporting elements, as well as, the related science and related math including measurement of plumbing and pipefitting. Students also learn basic soldering, brazing, torch cutting and how to use the International Pipe Trade Handbook. Basic rigging, signaling and introduction to the related equipment is taught.



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## **Business-Engineering Tech**

**General Engineering** 

### BTA101 Weld Skills-Shield/Metal Arc

Credit Hours: 5 Contact Hours: 6 Lecture Hours: 4 Lab Hours: 2 Other Hours: 0

This course teaches welding fundamentals and skills in Shielded Metal Arc Welding and Gas Metal Arc Welding. Students will also learn about various types of metals and the best types of welding for those metals. Students will also understand how the various welding gasses work to help the overall welding process.

Pre-regs:

### **BTA103** Plumbing Core and Code

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches students the rules and regulations of the International Plumbing Code pertaining to fixtures, water supply, drainage, venting, storm drains, and gas piping. This course also teaches students theory and application of waste drainage, vent materials, fittings and supports, traps and fixtures connections, the building sanitary drainage systems, vent systems, sewers, sewer treatment, storm drainage, and alternate sources of drainage systems. Sizing for drainage and sewers will be taught also. This course utilizes the 2017 Ohio Plumbing Code Manual for theory and applications.

Pre-regs:

## **BTA106** Advanced Fitting

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

In this course, students learn advanced fitting processes and procedures. Various techniques and methods for the layout of simple rolling offsets, miters, odd angle fittings, and odd angle laterals will be utilized. Pipe welding techniques and processes will be applied and skill building is a focus in the areas of Shielded Metal Arc Welding, Gas Tungsten Arc Welding, and Gas Metal Arc Welding.

**Pre-reqs:** 



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## **Business-Engineering Tech**

**General Engineering** 

### BTA108 Advanced Welding

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

In this course, students practice and build their specific skills on pipefitting related welding applications, utilizing Shielded Metal Arc Welding, Gas Tungsten Arc Welding, and Gas Metal Arc Welding processes. A variety of weld testing methods are utilized to check for quality welds.

Pre-regs:

# **BTA109** Crane Signaling

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course will teach students the understanding and applications of crane signaling for a safe and effective job site. Boom signals will be taught and practiced with job site safety as a focus.

**Pre-reqs:** 

## BTA110 CFC

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This class helps to prepare students to successfully sit for the Environmental Protection Agency Section 608 Technician Certification examination. Core areas covered in this course are: history of refrigerants, ozone and global warming, proper refrigerant recovery, refrigerant recycling and reclamation, safety, proper storage and transportation and transportation of refrigerants. This course also covers refrigerant recovery tools and equipment.



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# **Business-Engineering Tech**

**General Engineering** 

### **BTA111** Basic Electricity

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches core electrical concepts and theory with respect to electrical safety, voltage, amperage and resistance. Electrical troubleshooting is a key component of this class with respect to heating, ventilation, air conditioning and refrigeration control circuits. Students will utilize circuit design software as well.

Pre-regs:

#### BTA112 Gas Install

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the principles and applications of safe natural gas pipe joining for the heating, ventilation and air conditioning industry. This includes plastic joining fusion equipment for a variety of joining processes and applications. Concepts and applications for tapping and stopping pipelines under pressure will also be explored.

**Pre-reqs:** 

# BTA113 Tube Bending, Rigging & Signal

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course introduces students to the process of accurately bending tubing. An overview and application of the simple bending process, and the Setback, Advance, Gain process, as well as an understanding of how a bender works will be covered. This will include the trigonometric functions and calculations to accurately bend tubing to the needed dimensions.



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## **Business-Engineering Tech**

**General Engineering** 

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Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the core Direct Current and Alternating Current fundamentals with respect to heating, ventilating and air conditioning and related components. This includes applications related to fuel burning, water heating, air conditioning and refrigeration.

Pre-regs:

### **BTA116** Hydronics

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the fundamentals of hydronics, which is heat transported utilizing circulated water and its applications. Students will understand the methods and components in which heated circulated water can be utilized for controlled specific heating applications. This includes: boilers, heat exchangers, chillers, heat pump systems and additional related equipment.

**Pre-reqs:** 

# **BTA117** Refrigeration Controls

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This class covers the principles, operation, installation and servicing of the devices and equipment required to control the flow of refrigerant in all types of air conditioning and refrigeration systems.



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### BTA118 Sheet Metal Layout

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches basic sheet metal layout, calculations, principles and installation practices. Basic duct sizing and hanger configuration is also taught. Proper drawing and building of transition pieces for existing Heating, Ventilation, and Air Conditioning systems will also be a focus.

Pre-regs:

### BTA120 Start, Test, and Balance

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the principles of heat transfer and fluid flow, as related to hydronic balancing and system performance. Core electrical testing, troubleshooting and measurement will also be covered. The application and operation of system components, such as fans, pumps, duct systems, and hydronic piping systems will be taught in relation to heating, ventilating, and air conditioning systems.

**Pre-reqs:** 

# **BTA121** Schematics and Diagrams

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course covers how to read basic schematics, basic diagram symbols and nomenclature. The incorporation of diagrams and schematics into workplace application and equipment will be utilized. Extensive coverage of sequence of operation and flow of electricity through a diagram will be a core part of this course.



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# **Business-Engineering Tech**

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## BTA123 Supermarket Refrigeration

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides a broad understanding of commercial cooling and refrigeration systems. Topics will range from walk-in freezers and coolers down to refrigerated display cases. Typical troubleshooting of overall refrigeration systems as well as individual component diagnostics are taught. An overview of typical repair and maintenance, contracts and customer service communication skills will be discussed.

Pre-regs:

### **BTA124** Solar Systems

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the fundamentals of residential and light commercial solar water heating systems for domestic hot water systems. Core topics covered are: sight assessment, system design, sizing, installation, start up and service/maintenance.

**Pre-reqs:** 

# BTA125 Rigging, Signal, Shop Project

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course teaches additional rigging functions and processes with regards to the specific commands involved with crane signaling. This allows for safe hoist, movement and precise placement of loads at the job site. This course also includes a capstone (shop) project that includes many of the combined skills to create a plumbing and/or pipefitting specific project.



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# **Business-Engineering Tech**

**General Engineering** 

# BTA127 CO2 Transcritical Systems

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers the definition and uses of transcritical CO2 and their design and operation of systems, including the state of change of the CO2 inside the system. This includes CO2 system safety due to elevated operational pressures. Students will gain an overall understanding of CO2 equipment and where these systems will be used. The efficiency of CO2 systems and cost effectiveness are core elements covered including heat reclamation from CO2 transcritical systems.

Pre-regs:

### **BTA128** A2L Refrigerants

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches students principles and concepts of utilizing more toxic, flammable refrigerants in air conditioning and refrigeration systems that are less destructive overall for the environment. It will help students understand the impact all refrigerants have on the environment. The A2L refrigerant family is flammable so a focus on safety use and application will be a core component of this course.

**Pre-reqs:** 

## **BTA129** Install Braze and Solder

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches students to properly prepare and join cup type copper tubing joints utilizing both the soldering and brazing methods. Safe and proper tool use is stressed throughout this course. The identification and utilization of various filler materials, fluxes and solders are taught. A focus on typical brazing techniques for the heating, ventilation and air conditioning industry are taught and practiced.



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# **Business-Engineering Tech**

General Eng	

PET1	42	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-regs:

# PIP110 Plumbing/Pipefit Appl I

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course covers core plumbing and piping concepts and applications. Topics include maintenance tools and equipment, piping systems, plumbing systems, and piping layout.

Pre-regs:

# PIP120 Plumbing/Pipefit Appl II

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course covers intermediate plumbing and piping concepts and applications. Topics include building trades applications, steam/hot water systems, hydronics, and core systems maintenance.



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# **Business-Engineering Tech**

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PIP130	Plui	nbing	/Pipef	fit Appl I	I

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course covers advanced plumbing and piping concepts and applications. Topics include advanced building trades applications, backflow prevention application and design, and piping of medical gasses.

Pre-regs:

## PIP140 HVAC Systems Operations I

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course covers water related HVAC systems and applications. Topics include steam systems, hot water systems, and hydronics.

**Pre-reqs:** 

# PIP150 HVAC Systems Operations II

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course covers advanced heating and cooling systems in residential and commercial/industrial applications. Topics include advanced residential and commercial/industrial installation techniques and design principles.



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# **Business-Engineering Tech**

**General Engineering** 

## PIP164 Comp,Cond,Evap,Expan Devcs

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course teaches the identification, use and core operation definition of key components of Heating, Ventilation and Air Conditioning (HVAC) and Refrigeration. This specifically includes: compressors, condensers, evaporators, and expansion devices.

Pre-regs:

## PIP166 Circuit Bds & Wire Diagrams

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the basics of electrical/electronic function of circuit boards and their overall operation. This course also teaches how to read and understand wiring diagrams.

Pre-regs:

## PIP167 Ele Safe, Meters & Mat Ident

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches students how to safely work with and around electricity. It teaches the fundamentals of electrical measurement and resistance with a standard volt meter. Material identification selection in the form of proper wire gauge sizing is also covered.



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# **Business-Engineering Tech**

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PIP168	Pump	Oper	& Svst	Installation

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers core principles and applications of basic pump operation. This course also covers core fundamentals of pump installation in a variety of plumbing systems.

Pre-regs:

# PIP169 Soldering, Brazing, Tube Bending

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Students will learn the safe and proficient method of soldering and brazing. Students will learn soldering and brazing techniques used in the plumbing and pipe fitting field on typical joints and piping utilized in the field, such as, copper and cast iron. Fundamentals and techniques of proper tube bending to meet job needs will be taught.

Pre-regs:

# PIP195 Safe, Fittings, Intro to Code

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers safety application with respect to pipe fitting. It also teaches the various types of fittings involved with the pipefitting trade. This course introduces the students to the Ohio Plumbing Code Manual and its applications.



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PIP200	Undergrd,Steam	m.Hvdro Heat

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 4 Lab Hours: 4 Other Hours: 0

This course covers fundamentals and applications of underground, steam and hydronic heating theory and principles. This includes the understanding of when each should be utilized and best practices for the application.

Pre-regs:

## PIP205 Mech Drawing & Layout

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers the core concepts of mechanical drawing including concepts such as; front, side, top view. Students will understand hidden lines and orthographic projection. Project piping layout is another concept taught with respect to commercial applications.

**Pre-reqs:** 

# PIP210 Torch Cut, Soldering, Brazing

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers the concepts of material joining and precise cutting for pipefitting. Safe and effective practice of Oxyacetylene torch cutting will be taught. Joining of pipe and tubing utilizing proper solder and brazing techniques for field applications will be covered.



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## **Business-Engineering Tech**

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PIP215 Dig Layout,Plangrid,Tı	ube	Bend
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Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the student to jobsite digital layout software and the basic utilization of it for the pipefitting trade. This course also introduces students to Plangrid software to track construction progress. Another aspect of this course is the basic math and fundamentals of accurate tube bending.

Pre-regs:

## PIP220 Plumbing Code & Welding

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers core concepts and applications of Metal Inert Gas (MIG), Tungsten Inert Gas (TIG) and Oxyfuel welding. This course also covers the concepts and applications of plumbing code, specifically the Ohio Plumbing Code Manual.

Pre-regs:

# PIP225 Gas Tungsten Arc Welding

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the fundamentals of Gas Tungsten Arc Welding. This includes consumable identification and selection. Proper set up of the welding machine for various materials and consumables is also taught.



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Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the fundamentals of Shielded Metal Arc Welding. This includes wire identification and selection. Proper set up of the welding machine for various materials and consumables is also taught.

Pre-regs:

# PIP235 Metal Inert Gas Welding

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course teaches the fundamentals of Metal Inert Gas Welding. This includes consumable identification and selection. Proper set up of the welding machine for various materials and consumables is also taught.

**Pre-reqs:** 

## PIP241 Adv Controls & Backflow

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course adds to the knowledge base of students by introducing the student to the equipment and devices that control Heating, Ventilation and Air Conditioning equipment, pneumatics, and Direct Digital Controls. The lectures/labs address the function, operation, troubleshooting and service aspects. Students also learn the core concepts of backflow systems application and design.



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# **Business-Engineering Tech**

**General Engineering** 

## PIP242 Var Refrig Flow Sys & Install

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers Variable Refrigerant Flow systems. The students will understand methods to efficiently distribute cooling and heating from a single outdoor unit to multiple indoor zones. This course also teaches the proper installation method for a Variable Refrigerant Flow system.

Pre-regs:

## PIP243 Flame SafeCtrl, SpeRefrig,HVAC

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course teaches students how to safely work utilizing gas systems and flame control. This course also teaches fundamentals of refrigerants and their applications for various commercial uses. Fundamentals and applications of advanced Heating, Ventilation, and Air Conditioning design and uses will be discussed and applied.

**Pre-reqs:** 

# UPP106 Plumber/Pipefitter Math Appl

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

In this course, students learn applied math skills for the plumber and pipefitter trade. This includes bend calculations, calculating the appropriate amount of fall for drainage piping and other related contextualized math.



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# **Business-Engineering Tech**

**General Engineering** 

## UPP107 Torch Cut, Sold/Braz, Drain Sy

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

In this course, students learn identification of the various types of drainage systems and applications. Students also learn the safe and proficient use of Oxyacetylene Torch Cutting. Soldering and brazing techniques used in pipe joining are practiced with the goal of proficient joining of copper pipe by soldering and brazing. Additional joining methods are taught, to include poly vinyl chloride to cast-iron pipe.

Pre-regs:

## **UPP108** Fit, Join, Inter Drain Sy, Rig

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers pipefitting techniques including mechanical, grooved and pressed fittings. Students properly prepare and fit a butt weld joint, grooved joint and a 90-degree butt weld. Students create and install a complex drainage system from a pre-planned design using the Ohio Plumbing Code. Additionally, students are required to apply the basics of safe rigging and crane signaling as it pertains to pipefitting.

Pre-regs:

# UPP109 Pipe Fit/Fab & Appl, Tube Bend

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

In this course, students apply and demonstrate their fabrication skills in pipefitting. This includes all necessary applied mathematics for fabrication and fit. Methods include tube bending using the sag method, fabrication of pipe using the 57 1/4 method, tube bending fabrication on a jig from a piping and instrumentation drawing.



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## **Business-Engineering Tech**

**General Engineering** 

## UPP110 Plumb Des/Inst/Stain Semi Cond

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Students design and install a commercial plumbing system based on the Ohio Plumbing Code. This consists of the initial rough in to finish for a complete install. Students also learn the practices and applications involved with piping in the semiconductor industry.

Pre-regs:

## UPP111 Hyd Heat/Cool Pip/Stan Fit

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

Students learn the core principles of how a hydronic system operates and the different types of piping arrangements used while engineering a system. Students apply design, theory and installation of a Hydronic Heating and Cooling System in a commercial setting. This course also covers specific piping applications within the semiconductor manufacturing industry.

**Pre-reqs:** 

# UPP112 Adv Plumb Code/BackFlw Test

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

Students learn how to properly size and install a plumbing system, based on the 2017 Ohio Plumbing Code book. Students also properly test and repair a backflow system based on the definition of the Ohio Department of Commerce – Backflow Division. This course prepares a student to sit for the Ohio Backflow Testers License.



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# **Business-Engineering Tech**

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UPP113	Adv Hyd	Heat/	Cool S	ys Pi	pe

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

In this course, students learn advanced applications of hydronic systems and will design, fabricate and install a piping system utilizing all the components of a hydronic system.

Pre-regs:

# **UPP117** Refrig Inst/Princip Air Flow

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course teaches students about the principles and applications of refrigeration systems installation. This course also covers the principles of air flow to include: positive and negative pressure, air changes, and air flows between low and high pressure.

Pre-regs:

# UPP118 Start Test/Bal-Pump Mtce-Boil

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course teaches students core concepts of Heating, Ventilation, and Air Conditioning systems, Start Test and Balance. Another core concept that students learn is how to maintain various pumps, including predictive and preventive measures. This course also teaches the basics of how to service a boiler.



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# **Business-Engineering Tech**

**General Engineering** 

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Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course teaches students how to safely utilize principles and applications for industrial rigging and signaling. This course also teaches the principles of pneumatics and their applications as well as pneumatic controls.

Pre-regs:

## **UPP120** Test Start and Balancing

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course teaches students how to test and balance a commercial building to ensure the proper amount of air ventilation enters the space. This includes proper amount of air changes for the space use and square footage.

Pre-regs:

# UPP121 Boil Serv/Repair/Var RefrigFlw

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course teaches students advanced principles of boiler service and repair. This course also teaches students the principles, components and applications of a Variable Refrigerant Flow systems.

**Pre-reqs:** 

## **Business-Entrepreneurial**

**Accounting/Finance** 



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# **Business-Entrepreneurial**

**Accounting/Finance** 

## **ACC121** Introduction to Accounting

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 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-regs:

## **ACC128** Acctg Basics for Managers

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is an introduction to the language of accounting, cost concepts and financial reporting. The emphasis is on the use of financial information to understand the operations of a business and to make choices which best position the entity for future success. Upon completion of this course, students should be able to interpret and analyze financial information and use that information in business decision-making.

#### **Pre-reqs:**

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

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# **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 spring 2024; CTAG approved CTBU004, effective fall 2023.

Pre-regs:

#### ACC131 Taxation I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course is the first in a two-course sequence. The course examines principles of taxation for individuals, partnerships, and S corporations. In-depth analysis of the computation of income and deductions for all three types of entities will be covered. In addition, cost recovery, tax credits, and the overall classifications, filing statuses and reporting requirements are discussed as well as the effects of flow-through tax entities on individuals and businesses. Students will prepare comprehensive tax cases on IRS tax forms to gain applied knowledge. Upon completion of the course, students should be able to analyze complex tax scenarios and determine their impact on the tax liability of individuals, partnerships, and S corporations.

#### Pre-regs:

ACC132

## 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-OBU010, effective summer 2015. CTAG approved, effective fall 2023

**Pre-reqs:** 

**BUS124** 



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# **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- OBU011, effective summer 2015. CTAG approved, effective fall 2023

## Pre-regs:

ACC132

#### ACC221 INTERMEDIATE ACCT I

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers the accounting standard setting process and the conceptual framework. It includes a review of the accounting cycle, an in-depth study of the format and presentation of the income statement and balance sheet, the use of time value of money in accounting applications, and accounting and reporting for current and long-term assets. Students will perform accounting research using professional literature. Upon completion of this course, students should be able to demonstrate competence in a variety of financial accounting and reporting areas.

#### **Pre-reqs:**

ACC132

# ACC222 INTERMEDIATE ACCT II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This is the second in a two-course sequence. It completes the coverage of the balance sheet accounts with the accounting and reporting for current and long-term liabilities and stockholders' equity. The remainder of the course covers special topics such as earnings per share, investments, revenue recognition, income tax accounting, pensions, leases, and the statement of cash flows. Students will perform accounting research using professional literature. Upon completion of this course, students should be able to demonstrate competence in a variety of financial accounting and reporting areas.

#### **Pre-reqs:**

ACC221



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# **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 costing, process costing, activity-based costing/activity-based management, standard costing, and analysis of cost variances. Upon completion of this course, the student should be able to apply fundamental concepts of cost accounting in making business decisions.

## Pre-reqs:

ACC133

#### ACC225 AUDITING

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course covers higher level accounting topics. It includes an in-depth study of business combinations and the consolidation process. Consolidation topics include: preparation of the entries necessary to prepare the consolidated financial statements focused on inter-company sales of inventory and assets, non-controlling interests, foreign subsidiary companies and investments in affiliate's debt. The remainder of the course covers foreign currency transactions and translated financial statements, derivatives, partnership accounting and data analytics. Upon completion of the course the students should be able to demonstrate competence in consolidation accounting and other higher-level accounting topics.

#### Pre-regs:

ACC222

Can be Taken Concurrently

## ACC226 ADVANCED ACCOUNTING

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 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 derivatives and the accountant's role in estates and trusts. 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, derivatives, and estates and trusts.

Pre-reqs:

ACC221



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# **Business-Entrepreneurial**

**Accounting/Finance** 

## ACC227 Payroll Accounting

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course includes comprehensive coverage of payroll computations and all related taxes. Students will prepare payroll records, payroll journal entries and required tax forms. Upon completion of this course, students should have a functional knowledge of payroll accounting and reporting.

## Pre-reqs:

ACC121 Can be Taken Concurrently
Or ACC132 Can be Taken Concurrently

# ACC229 Acctg Software & Analytics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course involves recording and reporting accounting information using QuickBooks and an introduction to accounting applications in Enterprise Resource Planning (ERP) tools such as Systems, Applications and Products (SAP). It also includes an introduction to data analytics through Excel and data visualization software. Upon completion of this course, the student should have a functional knowledge of accounting software applications and procedures and basic data analytics applications.

# Pre-reqs:

ACC121

Or ACC132

And AOT226 Can be Taken Concurrently
Or ITD122 Can be Taken Concurrently

#### ACC231 Taxation II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is the second in a two-course sequence. The course examines advanced taxation topics including gain and loss transactions and limits on losses for both individuals and business entities. The course will cover advanced basis issues in formation of and distributions from business entities. Students will also be exposed to the basics of tax and reporting issues for exempt entities as well as taxation of trusts and estates. Students will prepare comprehensive tax cases on IRS tax forms to gain applied knowledge. Upon completion of the course, students should be able to analyze complex tax scenarios involving individuals and various forms of business entities, including trusts and estates, and determine their impact on tax liability.

# Pre-reqs:

ACC131



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# **Business-Entrepreneurial**

**Accounting/Finance** 

## ACC232 GOVT AND NOT-FOR-PRFT ACCT

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the accounting requirements for governmental and other not-for-profit entities. Students will gain a working knowledge to prepare and interpret accounting and financial information of various state and local governments under the Governmental Accounting Standards Board (GASB) and not-for-profit organizations under the Financial Accounting Standards Board (FASB) as well as governmental and not-for-profit health care organizations and educational institutions. Upon completion, the student should have a working knowledge of the budgetary and operational accounting and financial reporting of governmental and not-for-profit entities.

## Pre-regs:

ACC221

## ACC237 Forensic Acctg & Fraud Exam

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course covers the core foundation related to forensic accounting and fraud examination, providing understanding of the profile and psychology of the fraudster. Students will learn the legal, regulatory, and professional environment for both forensic accounting and fraud examination. Topics covered will include fraud schemes, financial statement fraud, interviewing, evidence gathering, cybercrime, and litigation support. Upon completion of this course, students should be familiar with the basic concepts of forensic accounting and fraud prevention and detection.

#### **Pre-reqs:**

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

# ACC238 Financial Statement Analysis

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course emphasizes the role of financial statement analysis in managerial decision making. Topics include a review of the form and content of the financial statements and various methods of analyzing liquidity, solvency, and profitability using the information in those statements. Upon completion of this course, the student should be able to analyze financial data and apply that analysis to developing effective management strategies.

## Pre-regs:



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# **Business-Entrepreneurial**

## **Accounting/Finance**

## **BUS124** Business Analysis

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 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 percentage computations; payroll; buying, markup and markdowns; simple interest; compound interest including business and consumer loans, ordinary annuities, stocks and bonds. The course also covers accounting concepts that require a mathematical solution such as depreciation, financial statements and ratios and budgeting. Upon successful completion of this course, the student should be able to apply fundamental analysis to business applications to make informed decisions.

## Pre-reqs:

- Or Test & Score: ACT Math 19
- Or Test & Score: ACT Reading 18
- Or Test & Score: Accuplacer College-level Math 040
- Or Test & Score: Accuplacer Elementary Algebra 097
- Or Test & Score: Accuplacer Reading 070
- Or Test & Score: Compass Algebra 039
- Or Test & Score: Compass Reading 80
- Or Test & Score: GED Reasoning Through Lang Art 1
- Or Test & Score: IDS Transfer Prof/Placement 3
- Or Test & Score: M022 Transfer Prof/Placement 3
- Or Test & Score: M023 Transfer Prof/Placement 3
- Or Test & Score: M092 Transfer Prof/Placement 3
- Or Test & Score: HS Math and Multiple Measures 3
- Or Test & Score: NextGen Accuplacer AAF Math 237
- Or Test & Score: NextGen Accuplacer Reading 244
- Or Test & Score: NextGen Accuplacer QAS Math 250
- Or Test & Score: Reading Proficiency 3
- Or Test & Score: SAT Verbal 480
- Or Test & Score: SAT Mathematics 510
- And IDS102
  - MTH022
- Or MTH023
- Or MTH092



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# **Business-Entrepreneurial**

**Accounting/Finance** 

#### FIN110 Personal Finance

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will address the economic concepts associated with personal financial planning. Topics covered include: preparing a personal financial plan and achieving financial goals; understanding federal tax principles and tax planning; managing personal assets including bank accounts, automobiles, and housing; evaluating and managing the various forms of personal credit; analyzing the need for and cost of life, health, and property insurance; managing various types of investments including a risk versus reward analysis; and, understanding the need for and methods of retirement planning. Upon successful completion of this course, students should be able to apply and demonstrate an understanding of the above topics relative to their personal financial goals. CTAG CTPF001 approved effective summer 2019

Pre-reqs:

#### FIN220 BUSINESS FINANCE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 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-regs:

ACC133

# FIN221 INVESTMENTS AND SECURITIES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides the student with an understanding of the basics of investing. This includes analyzing investment options, the concept of risk, and using various information sources. Upon completion of this course, the student should be able to research various types of investments and understand trading and investment activities.

**Pre-reqs:** 

ACC132



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# **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, determinants 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:

BUS221

Can be Taken Concurrently

## **Administrative Srv Off Applion**

## **AOT110** Intro to Admin Assisting

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course is designed to introduce the administrative assistant field. Topics covered include traits and skills an administrative assistant should possess, how an administrative assistant supports an organization, areas for employment and job opportunities, professional image and dress, communication, ethical behaviors, and interviewing administrative assistants. Upon completion of this course, students will have an understanding of the administrative assistant field and be able to apply the skills learned in this class to their academic program.

## Pre-regs:

## AOT140 Virtual Assistant Fundamentals

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the unique skills and qualities that a virtual assistant needs to be successful. Through research and lab projects, the student will explore the roles of a virtual assistant, business planning and operating, establishing a web presence, and many specialty service areas. Emphasis will be placed on providing services remotely for a varied and diverse clientele.

# Pre-reqs:

Or Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2

ITD100



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# **Business-Entrepreneurial**

**Administrative Srv Off Applion** 

## AOT228 Virtual Admin Asst Procedures

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Emphasis will be placed on how to be a successful virtual administrative assistant. Areas covered include creating a business plan, setting up an office, creating a list of services, determining rates, creating a marketing plan, advertising, obtaining clients, handling problems, and developing proper practices and procedures.

## Pre-regs:

AOT140

#### **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. CTAUT005, effective Spring 2016

## Pre-regs:

## **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



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# **Business-Entrepreneurial**

**Automotive** 

## AUT123 ENG DIAGNOSIS AND MAI 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-regs:

AUT121 Can be Taken Concurrently

#### **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

# 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



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# **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-regs:

**AUT121** 

Can be Taken Concurrently

## AUT128 Auto Diesel Eng Perf

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course covers the theory of operation of automotive diesel engines. The emphasis in this course is placed on the operation and servicing of diesel engine mechanical components, such as turbochargers, superchargers, engine blocks, cylinder heads, crankshafts, camshafts, pistons, and connecting rods. Reference will be made to other types of engine designs, 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

Can be Taken Concurrently

## **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:



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# **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-regs:

#### 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-regs:

## **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



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# **Business-Entrepreneurial**

**Automotive** 

## 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-regs:

AUT132 Can be Taken Concurrently

#### 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-regs:

AUT132 Can be Taken Concurrently

# 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



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# **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-regs:

#### **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-regs:

## AUT141 Steer, Susp, & Brak Oper

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed for technicians and students that desire to become dealership technicians. This course is designed to provide the student with a working knowledge of the theory and repair of 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 steering, suspension, and braking system inspection and repair techniques.

Pre-reqs:



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# **Business-Entrepreneurial**

**Automotive** 

## **AUT142** Auto Elect Systems

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed for technicians and students that desire to become 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-regs:

## AUT143 Heat, Vent, AC Light Veh

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course is designed for technicians and students that desire to become dealership technicians. This course is designed to provide the student with a sound knowledge of the theory and repair of 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 HVAC system diagnosis, servicing, and repair techniques. Hands-on practice will enable the students to apply these concepts and procedures to vehicles. Special emphasis is placed on the safety aspects related to heating and air conditioning service.

Pre-regs:

## **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-regs:** 



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# **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-regs:

#### 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

# **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



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# **Business-Entrepreneurial**

**Automotive** 

## **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

#### 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

# **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-regs:

AUT121



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# **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

#### 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-regs:

AUT121 Can be Taken Concurrently

# **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** 



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# **Business-Entrepreneurial**

**Automotive** 

## **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

#### 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

# **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-regs:

AUT121



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**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-regs:

**AUT121** 

#### **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-regs:

AUT121

Can be Taken Concurrently

# **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-regs:** 



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# **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-regs:

# **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-regs:

## **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-regs:** 



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# **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-regs:

**AUT125** 

#### 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-regs:

AUT125

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** 



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# **Business-Entrepreneurial**

**Automotive** 

# **AUT224** Auto Diesel Perf Sys

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 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** 

#### 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-regs:

AUT121

Can be Taken Concurrently

## **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** 



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# **Business-Entrepreneurial**

**Automotive** 

## 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** 

#### **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-regs:

## 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:** 



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# **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** 

# 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-regs:

AUT223

# 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-regs:** 

AUT223



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# **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:
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AUT223

## **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-regs:

## **AUT253 Computerized Eng Cntrl Sys**

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

This course is designed for technicians and students that desire to become 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 computerized engine control systems.

Pre-regs:



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# **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-regs:

**AUT125** 

#### 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-regs:

**AUT125** 

## 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** 



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# **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

#### 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-regs:

AUT221

Can be Taken Concurrently

## 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



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# **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

#### 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:** 

AUT 226 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-regs:

AUT223



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# **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

#### 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-regs:

AUT121 Can be Taken Concurrently

# 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



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# **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-regs:

#### 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:** 

# **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-regs:



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# **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-regs:

TOY101

Can be Taken Concurrently

## 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-regs:

TOY102

Can be Taken Concurrently

## TOY104 Toyota Engine 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-regs:

TOY101



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# **Business-Entrepreneurial**

**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-regs:

TOY104

## **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-regs:

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



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# **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 antilock 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-regs:

TOY201

Can be Taken Concurrently

## 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).

TOY201

## 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).



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# **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-regs:

TOY204

# **Business Mgt/Entrep**

## **BUS121 BUSINESS ADMINISTRATION**

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 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-regs:**

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 



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## **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. OT36-TMSBS, effective summer 2023

## Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

### **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. OT36 approved TMSBS, effective summer 2022

## Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102



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## **Business-Entrepreneurial**

**Business Mgt/Entrep** 

### BUS222 MACROECONOMICS

Credit Hours: 3 Contact 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. OT36-TMSBS, effective summer 2023

## Pre-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102

## 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:

## 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. CTAG approved CTCF001 effective Spring 2018 ITAG approved ITCF001, effective summer 2022



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## **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. CTCF005 effective fall 2018

## Pre-reqs:

**CUL119** 

Can be Taken Concurrently

And CUL120

Can be Taken Concurrently

### 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** 

## 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** 



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## **Business-Entrepreneurial**

**Business Mgt/Entrep** 

### CUL125 Culinary Nutrition/Menu Plan

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. Also included is basic culinary nutrition information as well as research, surveys and sales analysis that are key to menu planning.

## Pre-reqs:

**CUL119** 

And CUL120

### 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. CTCF009 effective fall 2018

## Pre-reqs:

**CUL122** 

And ITD122

### 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:

**CUL122** 

And ITD122



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## **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-regs:

CUL124

Can be Taken Concurrently

## CUL223 Catering, Beverage & Food Serv

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. Classical and contemporary service styles will be discussed and practiced. 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. Students will understand the responsible and profitable service of alcohol in the food service industry. This course will include the Alcohol Servsafe certification.

#### Pre-regs:

CUL122

## CUL225 Adv Portfolio Mgmt

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides students the opportunity to refine and improve advanced cooking techniques. Students will produce and document complex recipes and develop individual portfolios including self-critique and visual documentation that can be presented to future potential employers.

#### **Pre-reqs:**

**CUL124** 

And CUL221



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## **Business-Entrepreneurial**

**Business Mgt/Entrep** 

#### CUL226 Pantry and Garde Manger

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides students the opportunity to learn and practice techniques and methods in cold food production. Students will produce and critique several categories of cold food including the safe production of salads, dressings, and charcuterie. Students will study methods and techniques used in both classic and contemporary kitchens.

### Pre-regs:

**CUL122** 

## **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:**

## **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. CTENTR001, effective Spring 2016.

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3



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## **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. CTENTR001, effective Spring 2016.

Or Test & Score: SAT Verbal - 480

Or ENG102 IDS102

### 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

### ENT223 ENTREPRENEURSHIP PRACTICUM

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 1 Lab Hours: 14 Other Hours: 0

This is the capstone experience where the students put their business plan into practice. The students will work with mentors to start to apply their entrepreneurial knowledge to a new venture and evaluate a concept's feasibility. This course is based on the concept of exposing students to an entrepreneurial process by facilitating a thorough market strategy and a balanced mentorship.

Pre-reqs:



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## **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-reas:

**ENT120** 

### 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. TAG OBU012 approved effective Summer 2018.

## Pre-regs:

**BUS121** 

Or ENT120

## 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



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## **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-regs:

ACC128

Or ACC133

And MGT121

#### 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-regs:

And ACC128

Or ACC133

MGT121

## 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



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## **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** 

And MTH118

Or MTH124

Or MTH125

#### 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** 

## 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:** 



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## **Business-Entrepreneurial**

**Business Mgt/Entrep** 

## MGT237 Safety & Health Mgmt

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 0

This course provides a comprehensive study of occupational safety and health in a contemporary workplace. Content will emphasize risk management, legal issues surrounding work health and safety, and workplace hazard reduction. Students will apply updated OSHA standards to topics such as workplace violence, natural disasters, and terrorism.

## Pre-reqs:

MGT224

## MGT238 Strategic Staffing

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 0

This course develops a thorough understanding of strategic staffing. Students will acquire the knowledge base necessary to identify, attract, select, and retain quality staff. The course will provide education on legal and regulatory issues surrounding staffing while reinforcing competitive business practices in the current global economy.

#### **Pre-reqs:**

MGT224

## MGT239 Compensation & Benefits

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 0 Other Hours: 0

This course is a comprehensive study of the theoretical and legal perspectives governing the practical application of compensation and benefits. Emphasis for the course will be on job evaluations, wage surveys, incentives, pay equity, insurances, and worker's compensation.

### Pre-regs:

**MGT224** 



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## **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. OBU006

### Pre-regs:

**BUS221** 

#### 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

## 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. OCM012 TAG approved Spring 2012.

# Pre-reqs:

MKT121



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## **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. effective Summer 2016: CTSCM001

### Pre-regs:

MKT121

#### 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

## 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

## **Business Studies**



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## **Business-Entrepreneurial**

**Business Studies** 

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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-regs:

### 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:** 

## 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-regs:



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## **Business-Entrepreneurial**

**Business Studies** 

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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-regs:

### 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-regs:

## 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-regs:



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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.

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## **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-regs:

## 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:



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## **Business-Entrepreneurial**

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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-regs:

### 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:** 

#### **Business-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:



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### **Business-Information Tech**

## **Administrative Srv Off Applion**

### AOT107 DIGITAL TECHNOLOGIES

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course explores various digital technologies used in the modern office. Specific topics include review of current desktop, cloud, and web technologies and the analysis and selection of the proper tool for a business situation. Students will explore and practice using various products to gain proficiency in selection and use of the proper tools.

## Pre-reqs:

Or Test & Score: Computer Test - 21
Or Test & Score: HS Computer Class - 2

ITD100

## 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-regs:

Test & Score: Keyboarding Proficiency Exam - 1

Or AOT101

#### 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:

Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2



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### **Business-Information Tech**

## **Administrative Srv Off Applion**

### AOT128 Doc Devel & Web Mtce

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the concepts and applications of print and electronic publishing and website maintenance. Emphasis is placed on the creation of various types of high-quality documents and website maintenance. Upon completion, students should be able to design, produce, and maintain professional business publications and websites.

## Pre-reqs:

Or Test & Score: Computer Test - 21
Or Test & Score: HS Computer Class - 2
ITD100

## AOT129 Keyboard Skill Building

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, along with reinforcing the necessary skills to produce business correspondence. Emphasis on prescriptive keyboarding drills and other typing exercises are to improve keyboarding speed and accuracy. Upon completion, students should be able to diagnose their specific areas of weakness on the keyboard and properly format business documents.

# Pre-reqs:

AOT121

Or OAD121

## 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:



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#### **Business-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

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

### **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:

A0T127

## 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-regs:



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#### **Business-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:

And AOT130

OAD121

Or OAD130

#### AOT226 SHRSHEET MICROSFT EXCEL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course increases knowledge and skills to create and edit worksheets, use formulas and functions, sort and filter detail data visually, and present summary information in a consumable and professional format. Students have the opportunity to master the advanced functionality of Microsoft Excel and to apply those skills to business and personal applications. Although the basic functions of Excel will be covered, areas of focus include creating graphs and charts, using financial functions and analytical tools, linking worksheets and workbooks, importing and manipulating data, using macros (automation of tasks), and using auditing tools. Upon completion, students should be able to demonstrate proficiency in using Microsoft Excel.

### Pre-regs:

Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2

Or ITD100

## 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. CTAPS001 effective fall 2018

### Pre-regs:

A0T121

Or AOT127

Or AOT129

And AOT130

And ITD122



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### **Business-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

Or AOT228

Or AOT237

### 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-regs:

### 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:

Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2



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### **Business-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-regs:

And AOT224

A0T239

#### 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:

And AOT129

Can be Taken Concurrently

AOT130

### **ENG1111 CLARK-English**

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Writing and revising process, academic and argumentative essays; literary examples of descriptive, narrative, expository, and persuasive modes; language issues and library skills. Writing intensive. Primary focus on formal, written work, composed for a variety of audiences.

### Pre-regs:



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#### **Business-Information Tech**

## **Administrative Srv Off Applion**

#### **ENG2211 CLARK-Business Communication**

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Preparing and analyzing business documents using fundamental business communication principles and standards, technology, critical thinking skills, and research techniques in preparation for the workplace.

Substantial focus on customs and traditions of a nonEnglish-speaking country and the impact of those customs and traditions on expanding American business to that country. Development of oral communication skills using appropriate technology, strategy, and methods. Use of digital recording and PowerPoint slide projection equipment in online sections.

### 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-regs:

## 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. ITAG approved ITMSOS003, effective fall 2023

### Pre-regs:

Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2



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### **Business-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:

 $Test \& Score: Computer \ Test - 21$ 

Or Test & Score: HS Computer Class - 2

Or ITD100

## 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 spreadsheet programs. Upon completion, students should be able to utilize MS Excel as a basic business tool. ITAG approved ITMSOS005, effective fall 2023

### Pre-regs:

Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2

Or ITD100

## 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. ITAG approved ITMSOS004, effective fall 2023

### Pre-regs:

Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2



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### **Business-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 - 18

Or  $\,$  Test & Score: Accuplacer Reading - 070

Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

Or IDS102

### ITD122 COMPUTER APP FOR PROFESSNL

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Computer Applications for Professionals familiarizes students with major Windows-based applications software and introduces the Windows operating system, the Windows networking environment, and practices file and folder maintenance. The focus of the course is to provide students with basic understanding and competence in industry-standard word processing, spreadsheet, database, and presentation software applications that are used to solve scientific, business, and engineering problems. TAG OBU003 approved, effective summer 2021.

## Pre-reqs:

Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2



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#### **Business-Information Tech**

## **Administrative Srv Off Applion**

## ITD140 Digital Project Management

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides the foundation of basic project management concepts and terminology and the skills to effectively plan, implement, and control projects using an electronic project system. The basics of using a project management system are covered including creating a project schedule, using various views, producing useful reports, and managing project information, resources, and costs.

## Pre-reqs:

Or Test & Score: Computer Test - 21
Or Test & Score: HS Computer Class - 2
ITD100

## JCR1001 CLARK-Realtime Theory I

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

Writing, reading, and translating the written and spoken word by means of a National Court Reporters Association (NCRA) approved, conflict-free realtime theory. Emphasis on mastery of beginning machine shorthand principles, speed development of 40 words per minute (wpm) on dictation of familiar material, and rapid and accurate reading of steno notes. Introduction to realtime career opportunities, professional organizations, ethics of the realtime profession, the National Court Reporters Association (NCRA) code of Professional Ethics, certifications, and life-long learning.

### Pre-regs:

### JCR1002 Realtime Theory II

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 Lab Hours: 3 Other Hours: 0

Advanced writing, reading, and translating the written and spoken word by means of a National Court Reporters Association (NCRA) approved, conflict-free realtime theory. Emphasis on mastery of advanced machine shorthand principles, speed development of 60 words (wpm) on dictation of familiar material, and rapid and accurate reading of steno notes.

## Pre-reqs:

ICR1001



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#### **Business-Information Tech**

**Administrative Srv Off Applion** 

## JCR1003 CLARK-Realtime Theory Apps

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

#### CLARK STATE COMMUNITY COLLEGE

Application of realtime theory foundation. Emphasis on mastery of brief forms, phrases, basic realtime editing functions, speed development of 60 words per minute (wpm) on dictation of unfamiliar material, and rapid and accurate reading of steno notes.

Pre-regs:

## JCR1101 CLARK-Skill Building I

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

#### CLARK STATE COMMUNITY COLLEGE

Development of writing skills, readback and analysis of shorthand notes, proofreading skills, and quality practice habits. Dictation in literary, jury charge, and testimony material for development of skill and accuracy in speeds ranging from 50-100 words per minute (wpm). Monitored realtime transcription of speed dictation tests in each of the areas of dictation completed within 70 minutes immediately following recorded dictation. Student analysis of vocabulary, grammar, spelling, and punctuation. Use of online, computer-aided transcription technology with teacher interaction. Designed for competency-based modular instruction.

Pre-regs:

## JCR1102 Skill Building II

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

Further development of writing skills, readback and analysis of shorthand notes, proofreading skills, and quality practice habits. Dictation in literary, jury charge, and two-voice testimony material for development of skill and accuracy in speeds ranging from 70-120 words per minute (wpm). Introduction to multivoice dictation, use of speaker IDs, and computer-integrated courtroom setup. Monitored transcription of speed dictation tests in each of the areas of dictation concentration completed within 70 minutes immediately following recorded dictation. Student analysis of vocabulary, grammar, spelling, and punctuation. Production of one-page unedited realtime transcript of unfamiliar material with accuracy rate of 96 percent. Use of online, computer-aided transcription technology with teacher interaction. Designed for competency-based modular instruction.

Pre-regs:

JCR1101



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#### **Business-Information Tech**

## **Administrative Srv Off Applion**

## JCR131 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-regs:

## JCR2103 CLARK-Skill Building III

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

#### CLARK STATE COMMUNITY COLLEGE

Application of writing skills, readback and analysis of shorthand notes, proofreading skills, and quality practice habits. Dictation in literary, jury charge, and two-voice testimony material for development of skill and accuracy in speeds ranging from 90-160 words per minute (wpm). Development of writing skill in multivoice dictation and use of speaker IDs. Application of computer-integrated courtroom setup knowledge. Monitored transcription of speed dictation tests in each of the areas of dictation concentration completed within 70 minutes immediately following recorded dictation. Student analysis of vocabulary, grammar, spelling, and punctuation. Production of two-page unedited realtime transcript of unfamiliar material with accuracy rate of 96 percent. Use of online, computer-aided transcription technology with teacher interaction.

#### **ICR2104** Skill Building IV

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

Further application of writing skills, readback and analysis of shorthand notes, proofreading skills, and quality practice habits. Dictation in literary, jury charge, and two-voice testimony material for development of skill and accuracy in speeds ranging from 110-180 words per minute (wpm). Application of writing skill in multivoice dictation and use of speaker IDs. Demonstrate knowledge of computer-integrated courtroom setup. Exposure to current events tools. Monitored transcription of speed dictation tests in each of the areas of dictation concentration completed within 70 minutes immediately following recorded dictation. Student analysis of vocabulary, grammar, spelling, and punctuation. Production of three-page unedited realtime transcript of unfamiliar material with accuracy rate of 96 percent. Use of online, computer-aided transcription technology with teacher interaction. Designed for competency-based modular instruction.

Pre-reqs:

ICR2103



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#### **Business-Information Tech**

**Administrative Srv Off Applion** 

## JCR2105 CLARK-Skill Building V

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

#### CLARK STATE COMMUNITY COLLEGE

Implementation of writing skills, readback and analysis of shorthand notes, proofreading skills, and quality practice habits. Dictation in literary, jury charge, and two-voice testimony material for development of skill and accuracy in speeds ranging from 130-200 words per minute (wpm). Development of writing skill in medical terminology. Execution of writing skill in multivoice dictation and use of speaker IDs. Application of current events tools. Monitored transcription of speed dictation tests in each of the areas of dictation concentration completed within 70 minutes immediately following recorded dictation. Student analysis of vocabulary, grammar, spelling, and punctuation. Production of four-page unedited realtime transcript of unfamiliar material with accuracy rate of 96 percent. Use of online, computer-aided transcription technology with teacher interaction. Designed for competency-based modular instruction.

## JCR2106 Skill Building VI

Credit Hours: 3 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

Demonstrate quality writing skills, readback and analysis of shorthand notes, proofreading skills, strong practice habits, and knowledge of current events tools. Dictation in literary, jury charge, and two-voice testimony material for development of skill and accuracy in speeds ranging from 150-225 words per minute (wpm), with course completion goal of required graduation speeds at 225 wpm testimony, 200 wpm jury charge, and 180 wpm literary at a minimum of 95 percent accuracy. Application of writing skill in medical terminology, multivoice dictation, and use of speaker IDs. Monitored transcription of speed dictation tests in each of the areas of dictation concentration completed within 70 minutes immediately following recorded dictation. Student analysis of vocabulary, grammar, spelling, and punctuation. Production of five-page unedited realtime transcript of unfamiliar material with accuracy rate of 96 percent. Use of online, computer-aided transcription technology with teast cherinteraction. Designed for competency-based modular instruction.

JCR2105

## JCR2200 CLARK-Realtime Business Proced

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

## CLARK STATE COMMUNITY COLLEGE

Role of the realtime court reporter in trials, depositions, and administrative hearings with application of the National Court Reporters Association (NCRA) Guidelines for Professional Practice for Court Reporters; overview of transcript preparation and production; development of office management skills; overview of broadcast captioning and Communication Access Realtime Translation (CART) including the psychology of on-air captions, Federal Communications Commission (FCC) regulations, broadcast news production, pre-scripting, the NCRA CART Provider's Manual, NCRA Guidelines for Professional Practice for Captioners and CART Providers, and the Americans with Disabilities Act (ADA); overview of interview process; professional development in dress and conduct; involvement in professional associations and appreciation of continuing education. Pre-reas:



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## **Business-Information Tech**

**Administrative Srv Off Applion** 

#### **ICR2300 CLARK-CAT Transcript Prod**

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 Other Hours: 0

#### CLARK STATE COMMUNITY COLLEGE

Application of principles of transcript editing and production techniques using computer-aided transcription (CAT) software with a focus on CAT terminology, proper scoping and proofreading skills, applying correct grammar rules, dictionary management, parenthetical creation and application, and template file usage in preparation for employment.

Pre-regs:

## JCR2400 JCR Internship

Credit Hours: 2 Contact Hours: 6 Lecture Hours: 1 Lab Hours: 5 Other Hours: 0

Judicial court reporting practice in both the official and freelance areas, with a minimum of 60 writing hours and 15 observation hours under the supervision of a practicing court reporter using machine technology. Dictation in literary, jury charge, and two-voice testimony material for demonstration of required graduation skill speeds of 180 words per minute (wpm) literary, 200 wpm jury charge, and 225 wpm two-voice testimony at 95 or 96 percent accuracy. Simulated Registered Professional Reporter (RPR) examination. Upon graduation, students should be prepared to pass the National Court Reporters Association's (NCRA) RPR examination.

Pre-regs:

## MST1105 CLARK-Medical Terminology

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Language of medicine. Medical prefixes, suffixes, root words, singular/plural forms constructed to form medical terminology. Definition, spelling, and pronunciation of terms related to organization of the body, body systems, pathology, diagnostic and treatment procedures, pharmacology and medical specialists. Standard medical abbreviations.

**Pre-reqs:** 



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#### **Business-Information Tech**

## **Administrative Srv Off Applion**

#### MTH1060 CLARK-Business Mathematics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Application of fundamental problem solving concepts, techniques, and skills relating to the quantitative aspects of business. Topics covered include bank reconciliations, percentages, simple and compound interest, depreciation, markups and markdowns, trade and cash discounts, sales and property taxes, promissory notes, insurance, loan amortization, mortgages, and business statistics.

### Pre-regs:

## PDE1402 CLARK-Digital Editing Applicat

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Application of digital editing skills to real-world scenarios. Professional editing techniques with proficiency utilizing Computer-Aided Transcription (CAT) software; application of CAT editing commands; application of include and parenthetical files; interpretation of digital reporter annotations; application of save/upload/download of files to appropriate destinations; CAT system troubleshooting; audio file synchronization with CAT; production of verbatim transcripts; secure delivery of digital files; application of marketing strategies; management of job scheduling/tracking/invoicing; preparation for professional certification.

### PDR1501 CLARK-Digital Rptg Concepts

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Principles and ethics using hardware and software recording options in digital reporting; proficiency in system components, setup, and functionality; annotation file creation and usage; file naming conventions; upload/download files to directories, cloud-based sites, and external storage devices; test audio for various professional venues; troubleshoot software, hardware, and peripherals; speaker designations and parenthetical creation/usage; search and audio playback; examination of verbatim transcripts; secure digital file transmission; archival/disposal process of audio and transcript files.



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#### **Business-Information Tech**

## **Administrative Srv Off Applion**

#### **PDR1502 Digital Reporting Applications**

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

Digital reporting practice providing for application of digital reporting skills to real-world scenarios encapsulating learning objectives of the digital reporting major: employing professional reporting techniques in various venues with proficiency in digital reporting unit (DRU) setup and utilization; application of speaker designation conventions and annotation files; saving and uploading/downloading files to appropriate destination; performing DRU system and peripherals troubleshooting; providing audio playback; producing verbatim transcripts; archiving and disposing of audio and transcript files; applying marketing strategies; managing job scheduling/tracking/invoicing; and preparing for professional digital reporting certification.

### Pre-regs:

PDR1501

## **Computer Science**

### AIN121 Intro to Artificial Intell

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to the emerging field of Artificial Intelligence (AI) and its applications. Students will explore the many ways that AI can be used and will be able to describe the types of Artificial Intelligence technologies that exist, including but not limited to Machine Learning, Neural Networks, Computer Vision, and Natural Language Processing. Using hands-on modeling tools, students will build a model to make predictions. Students will also engage in discussions regarding ethical concerns and responsibilities unique to AI technologies. This course will examine and discuss the impacts of AI in the world, in the student's daily lives, and the potential impacts to their careers.

### Pre-regs:

## 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 to support Windows client devices in an enterprise network. Topics include supporting client applications in the cloud, security, basic computer networking, data storage, remote connections, shared resources, and system recovery. There are numerous hands-on labs to practice implementing computer support concepts in a real-world situation. Upon completion, students will have critical-thinking and decision-making acumen needed for success as a support specialist. CTAG approved CTIT006, effective fall 2018.

# Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3



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#### **Business-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 to support Windows client devices in an enterprise network. Topics include supporting client applications in the cloud, security, basic computer networking, data storage, remote connections, shared resources, and system recovery. There are numerous hands-on labs to practice implementing computer support concepts in a real-world situation. Upon completion, students will have critical-thinking and decision-making acumen needed for success as a support specialist. CTAG approved CTIT006, effective fall 2018.

#### **Pre-reqs:**

Or Test & Score: SAT Verbal - 480

**IDS102** 

#### 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:

CPD121

### 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 Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480



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### **Business-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-regs:

**IDS102** 

#### 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

ECA253

## 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:**

**CIS125** 



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#### **Business-Information Tech**

**Computer Science** 

### CIS223 IT PROJECT MANAGEMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course students learn about IT-related projects and the five project management process groups associated with project planning. Topics will include areas from Project Integration Management, Scope Management, Time Management, Cost Management, Quality Management, Communication Management, Risk Management, Procurement Management, and Stakeholder Management. Students will use software to help build and manage projects. Upon completion, students will have skills to explore, in greater detail, various project management tools.

### Pre-regs:

ITD140

## CIS224 Advanced Help Desk

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course broadens student customer service skill set. The course continues to build on end user communication methods, both oral and written. Students will be exposed to Information Technology Infrastructure Library (ITIL) and Help Desk Institute (HDI) best practices.

#### **Pre-reqs:**

**CIS121** 

## 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 handson labs to learn how to apply the techniques presented.

## Pre-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Computer Test - 21

Or Test & Score: Compass Reading - 080

Or Test & Score: HS Computer Class - 2

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3



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# **Business-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 handson labs to learn how to apply the techniques presented.

# Pre-reqs:

Or Test & Score: SAT Verbal - 480 IDS102 And ITD100

# **CPD123** Structured Query Language

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces database technology, relational database concepts, and the powerful SQL programming language. This course provides the students with the essential SQL skills of querying the database and the metadata along with creating database objects. 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:

CPD121

# 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-regs:

Or CPD122

**CPD123** 

Or CPD222



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# **Business-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

Or CSE122

Or CSE122A

And CSE122B

ECA127 Can be Taken Concurrently

# CSE122 PROGRAMMING LOGIC & PROB SOLV

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students 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, students will develop the logic to solve programming solutions using structured flowcharts and pseudocode. CTAG approved CTPROG001, effective fall 2017 TAG approved OIT001, effective summer 2023

# Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Computer Test - 21

Or Test & Score: Compass Reading - 080

Or Test & Score: HS Computer Class - 2

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

And ITD100



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# **Business-Information Tech**

**Computer Science** 

# CSE122A PROGRAMMNG LOGIC & 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: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

And Test & Score: Computer Test - 21

Or Test & Score: Compass Reading - 080

Or Test & Score: HS Computer Class - 2

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

Or ITD100

# 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

ECA127A



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# **Business-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:

CSE231

Or ECA223

# 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:

CSE122

# 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



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# **Business-Information Tech**

**Computer Science** 

# CSE226 XAML Development

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 programs created using XAML and C#. In this course, students will create basic applications with XAML to run on various platforms. Students will also learn how to use available emulation environments to run and test their applications.

# Pre-reqs:

Or CSE231

ECA223

# CSE229 .Net 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.Net programming languages. Upon completion of this course, the student should be able to develop a desktop application with a graphical user interface, write code using .Net control structures, properly validate user input, and test and debug the application.

# Pre-reqs:

Or CSE122

Or CSE122A

And CSE122B

ECA127

# CSE230 Adv .Net Development

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course examines advanced features of the NET languages 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 .NET languages 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

ECA128



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# **Business-Information Tech**

**Computer Science** 

# CSE231 JAVA PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

The course covers the fundamentals of Java such as creating and executing Java programs that apply sequential, conditional and repetitive logic constructs. Students will also learn best programming practices through application of structured programming principles and object-oriented concepts. Arrays, classes, methods, and application of object-oriented techniques are also central topics. Upon completion, students will have an understanding of the Java language and the skills to develop solutions for intermediate-level programming problems. CTAG approved CTPROG002 effective fall 2017

# Pre-reqs:

Or CSE122

ECA127

#### CSE231A JAVA PROGRAMMING A

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces students to software programming logic and problem-solving techniques using the Java programming language. Sequential, conditional and repetitive logic constructs are central topics. Upon completion, students should have an understanding of the Java language and the skills to develop the logic to solve programming problems.

# Pre-reqs:

Or CSE122

Or CSE122B

ECA127

# CSE231B JAVA PROGRAMMING B

Credit Hours: 1.5 Contact Hours: 2 Lecture Hours: 1 Lab Hours: 1 Other Hours: 0

This course introduces students 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. Students learn how to write Abstract Data Types as a part of the object-oriented presentations. Upon completion, students should have an understanding of the Java language and the skills to develop the logic to solve advanced programming problems.

# Pre-reqs:

CSE231A



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# **Business-Information Tech**

**Computer Science** 

# CSE232 ADVANCED JAVA PROGRAMMING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course delves into advanced object-oriented topics such as inheritance, exception handling, graphical user interface, recursion, collections, file manipulation, and searching and sorting. Using a collection of practical application and hands-on labs, students will learn advanced aspects of an object-oriented language. Upon completion, students should have an understanding of the Java language and the skills to develop the logic to solve advanced programming problems.

# Pre-regs:

Or CSE231

Or CSE231A

And CSE231B

ECA223

# 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. CTAG approved CTPROG003 effective fall 2017

# Pre-reqs:

Or CSE122

Or CSE122A

And CSE122B

ECA127

# 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

Or CSE122B



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# **Business-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

#### 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-regs:

Or CSE233

ECA222

# CSE235 PYTHON DEVELOPMENT

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course will introduce students to basic programming and syntax, object-oriented techniques, and GUIs using the Python development environment. Control structures, functions, classes, and inheritance will be covered. Additionally, the practical application of Python programming will be examined. Upon completion of the course, students should understand how to create functional programs using the Python programming language.

# **Pre-reqs:**

Or CSE122

ECA127



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# **Business-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:

**CIS221** 

And CPD123

Or CSE229

Or CSE231

Or CSE233

Or CSE235

Or WDD221

Or WDD222

Or WDD224

Or WDD225

Or WDD226

# CSE237 Advanced Python Development

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

In this course students will learn more complex Python concepts and push the limits of their abilities through practical exercises and assignments using Python. By building on fundamental Python principles, students will learn to confidently experiment with the scripts they write and to produce exciting, functional results. Upon completion of this course students will know how to use applications that interact with Python.

# Pre-regs:

CSE235



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# **Business-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-regs:

# **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

ECA127

And EET131

# 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

And ECA130

And EET131

And EET141



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#### **Business-Information Tech**

**Computer Science** 

#### SGE121 GAME DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides a broad overview of the game design process. Students explore the game design process by inventing the concept and design of their own board/video game. Students walk through the process of creating their own game design document and use it to guide them as they work on their game project. The course explores a variety of game design concepts while students work through their game project including game worlds, character development, core mechanics and game balance. Students are also introduced to the magic circle and level design.

### **Pre-reqs:**

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

# SGE221 ADV GAMING AND SIMULATN TOPICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is divided into three sections. The first section deals with physics and has students use rigidbodies, colliders, and hinges to create different physics effects. The second section of this course focuses on the user interface (UI) and building game menus and information to the screen in a clear manner to the player. The third section of the course is about artificial intelligence (AI) and designing different ways to have the games' enemies patrol and attack.

# Pre-reqs:

SGE222

# 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 create movement scripts, design maze levels, create inventory systems, and script basic artificial intelligence (AI) for enemy players. Students create triggers to open doors and spawn events and non-player characters (NPCs). Students also learn how to script triggers that import images from third party websites into their game when players activate them, which can be used to add advertising or give the player directions.

# Pre-regs:



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# **Business-Information Tech**

**Computer Science** 

# 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 create movement scripts, design maze levels, create inventory systems, and script basic artificial intelligence (AI) for enemy players. Students create triggers to open doors and spawn events and non-player characters (NPCs). Students also learn how to script triggers that import images from third party websites into their game when players activate them, which can be used to add advertising or give the player directions.

# Pre-reqs:

Or SGE223

#### SGE223 2D GAME DESIGN AND DEVELP

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course has students build a complete first level of a 2D game similar to the original Mario Brothers game. Students build title screens, option menus, and other user interface (UI) elements such as health meters and coin counters. Students create triggers to spawn enemies, create moving platforms and obstacles for the player to get around. Students script basic artificial intelligence (AI) for enemy non-player characters (NPCs) and create an end condition to trigger the completion of the level.

#### Pre-regs:

CSE122

And SGE121

# SGE224 Game Programming I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course develops the students' understanding of simulation and game production and implementation. Activities are focused upon understanding of advanced concepts and implementation techniques central to game development. Lab activities are focused upon the writing of code for games in a high-level programming language. Upon completion, the student will be able to code for advanced gaming methods and procedures.

# **Pre-reqs:**

CSE122



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# SGE225 Assets for Games

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the use of game assets in the Unity game engine. Students will learn how to find assets in the Unity asset store as well as how to import pre-made assets from other sources outside the Unity asset store. These assets will include 3D art, animated characters as well as music and sound effects. Students will be shown several sites that offer these pre-made assets and the different licensing issues with these assets will be discussed.

# Pre-regs:

**SGE121** 

# SGE226 Game Programming II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course further develops the students' understanding of the simulation/gaming production and implementation process. Class activities are focused upon understanding of more advanced concepts and implementation techniques central to the game and simulation development process. Lab activities are focused upon the writing of simple, yet complete, interactive programs in a high-level programming language.

#### Pre-regs:

SGE224

# SGE230 Game Portfolio

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is the capstone experience in video game design and development. The project experience will synthesize previously covered techniques by allowing the students to design and develop an entire simulation/game project. The students will, under the guidance of faculty mentors, take a complete project from idea to proposal to development to product in a diverse team environment. The project sequence culminates with the completion and formal presentation of a completed working interactive 3D simulation/game.

**Pre-reqs:** 

SGE221

Can be Taken Concurrently



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#### **Business-Information Tech**

**Computer Science** 

#### **WDD121** Internet Design & Development

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. CTAG approved CTIM004 effective fall 2017

# Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

And Test & Score: Computer Test - 21

Or Test & Score: Compass Reading - 080

Or Test & Score: HS Computer Class - 2

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102

Or ITD100

# 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: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Computer Test - 21

Or Test & Score: Compass Reading - 080

Or Test & Score: HS Computer Class - 2

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244



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#### **Business-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: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102

And ITD100

# 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

### 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

Or WDD121

Or WDD121A

And WDD121B



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# **Business-Information Tech**

**Computer Science** 

# 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-regs:

ECA228

Or WDD121

Or WDD121A

And WDD121B

# 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

# WDD221 Web Development w/ JavaScript

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to JavaScript along with current web technologies such as AJAX, jQuery, and JSON. Students will develop interactive websites using these technologies which provide for an excellent portfolio piece. Various assignments enhance the student's ability to master JavaScript along with many web development components. Hands-on labs are utilized to reinforce the presented materials.

# Pre-reqs:

**CSE122** 

And WDD121



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**Computer Science** 

#### 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-regs:

ECA228

Or WDD121

Or WDD121A

And WDD121B

# WDD223 Content Mgt System Des & Dev

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

And ECA228

ECA253

Or WDD121

Or WDD121B

# 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

Or CSE122B



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# **Business-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-regs:

And ECA127

ECA228

Or WDD121

Or WDD121B

# WDD225 ASP.Net MVC Development

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:

CSE122

And WDD121

# WDD226 WEB DEV WITH PHP AND MYSOL

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-regs:

Or CSE122

Or CSE122B

And ECA127

ECA228

Or WDD121



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# **Business-Information Tech**

**Computer Science** 

# WDD226 WEB DEV WITH PHP AND MYSOL

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-regs:

Or WDD121B

#### 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

Or WDD122

# **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. CTAG approved CTCYBR001, effective fall 2019

Pre-regs:



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# **Business-Information Tech**

**Computer Security** 

# 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-regs:

Or ECA145

**NET120** 

#### 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:

# **CFS210** Cyber Defense Fundamentals

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course provides students the opportunity to expand on the knowledge, skills, and practical exercises they have been exposed to in prior classes to prevent, detect, and respond to a cyber-attack. Students will expand their exposure to and use of open-source network tools for network monitoring and analysis. Successful completion of this course maps to the CompTIA Cybersecurity Analyst Certification (CySA+)

# **Pre-reqs:**

**CFS136** 

And NET220



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# **Business-Information Tech**

**Computer Security** 

# CFS250 Cyber Sec & Dig Foren Prac

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 1 Lab Hours: 7 Other Hours: 0

Students will complete practical assignments to facilitate locating an internship position to complete a total of 105 hours in an approved cyber security, digital forensics, or information technology setting (physical or virtual) to apply the skills learned in the program. Students will submit assignments to promote lessons learned from the experience and pass these along to their peers throughout the process and in a final presentation.

# Pre-reqs:

CFS256

And CFS275

# 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:

# 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

ECA137



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# **Business-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-regs:

CFS257

Or ECA257

# 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 ECA145

Or ECA277

NET120

And NET220

# 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-regs:

**CFS137** 

Or ECA137



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# **Business-Information Tech**

**Computer Security** 

# 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-regs:

Or ECA277

**NET220** 

# 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** 

And NET121

And NET220

# 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:



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# **Business-Information Tech**

**Computer Security** 

# IMT121 INTERACTIVE MEDIA

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course examines communication and storytelling through a variety of media, including visual design, sketching, storyboarding, 3D modeling, and sound design. Upon completion, students will present a previsualization of an original story idea through a series of audio, video, and design projects. CTAG CTMDA001 approved, effective spring 2022

Pre-regs:

# 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. CTAG approved CTGRPH001 effective fall 2019

#### **Pre-reqs:**

Or Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2

ITD100

# 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-regs:



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# **Business-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-regs:

IMT122A

# 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 successful completion, students will be able to effectively use 3D software to create and render 3D objects and scenes. CTAG approved - CTIM007 effective spring 2015.

**Pre-reqs:** 

# IMT129 DIGITAL AUDIO RECG AND EDITING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the basics of audio recording and digital sound manipulation. Specific topics include waveform characteristics, basic recording techniques, and audio editing and mixing. Upon completion, students will be able to capture and modify audio to create music and sound designs for a variety of media including TV, radio, web, and game design. TAG approved Summer 2012 OCM007. CTAG approved effective summer 2012 CTMDA002

Pre-regs:



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# **Business-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. CTAG approved CTVDI002, effective fall 2018.

Pre-regs:

# 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:** 

# IMT134 TECHNICAL MUSICIANSHIP

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers ear-training, sight-singing, basic keyboard techniques, and arranging. Upon completion, students will have developed the skills necessary to compose and arrange music using MIDI controllers and notation software.

Pre-reqs:

IMT135

Can be Taken Concurrently



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# **Business-Information Tech**

**Computer Security** 

IMT135	MIISIC	THEORY	AND	COMPOSITIO	ΝI
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Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the basics of pitch and rhythm in music. Specific topics include meter, scales, keys, and intervals. Upon completion, students will have developed skills in diatonic ear-training, analysis, and notation.

Pre-regs:

# **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:** 

# IMT137 DRAWING BASICS

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers foundational drawing principles. Students will apply these principles by drawing a variety of subjects from both reference and memory. Students will also learn to use a variety of physical and digital drawing mediums.

Pre-regs:



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# **Business-Information Tech**

**Computer Security** 

# **IMT141** Typography Fundamentals

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces students to the practice of letterforms and typography as they apply to designs and visual communications. Students will learn the technical and aesthetic aspects of type as an integral design element and how to apply typographical concepts to page layouts. CTAG approved CTVDI001, effective Summer 2017.

# Pre-regs:

#### 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. CTAG approved effective fall 2012, CTMDA003

#### **Pre-reqs:**

Or Test & Score: Computer Test - 21

Or Test & Score: HS Computer Class - 2

ITD100

# 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 environment 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-regs:

And IMT125



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# **Business-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-regs:

IMT129

#### 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

# 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 IMT242. There will be more focus on the creation of professional-level video productions. Student projects will be used to explore the latest techniques in the video industry. TAG approved Summer 2012 OCM010.

# Pre-regs:



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# **Business-Information Tech**

**Computer Security** 

# IMT239 MUSIC SYNTHESIS I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course introduces the basics of music synthesis. Specific topics include synthesizers, waveform processing, MIDI, MIDI controllers, sequencing, and composing. Upon completion, students will have developed skills in creating music and sound using sample libraries, synthesizers, and sequencing software.

# Pre-regs:

And IMT129

**IMT247** 

#### 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

# **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:**



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# **Business-Information Tech**

**Computer Security** 

# 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 projects using compositing and 3D software packages.

# Pre-reqs:

**IMT237** 

#### IMT244 DIGITAL PAGE LAYOUT AND DESIGN

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is a project-focused, portfolio-building page layout course. Includes lessons on typography, design theory, print terminology, and images. Students will independently create a select number of industry standard projects such as: flyers, brochures, menus, newsletters, and magazines.

#### **Pre-reqs:**

**IMT122** 

And IMT131

And IMT141

# 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:



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# **Business-Information Tech**

**Computer Security** 

# 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-regs:

IMT250

#### IMT247 MUSIC THEORY COMPOSITION II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the basics of harmony, form, and composition in music. Specific topics include triads and seventh chords, the harmonic system, church modes, part-writing, ear-training, basic chromaticism, and musical forms. Upon completion, students will be able to create 16 to 48-bar compositions in four-voice structure.

#### **Pre-reqs:**

IMT135

# 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-regs:

And IMT122



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# **Business-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

#### IMT253 GRAPHICS FOR ILLUSTRATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Vector Graphics focuses on the creation and editing of resolution independent images. Students use digital drawing techniques to create vector graphics for the use in other interactive media projects or as independent compositions. Topics range from the creation of vector graphics through choosing the appropriate output method for their intended use. CTAG approved - CTGRPH002 effective fall 2019

#### **Pre-reqs:**

IMT122

# 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-regs:

**IMT244** 

And IMT245

And IMT253



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# **Business-Information Tech**

**Computer Security** 

# IMT255 ADVANCED ILLUSTRATION

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is a project-focused, portfolio-building advanced vector graphics course. Includes lessons on various digital drawing techniques. Students will independently create a select number of industry-standard projects in areas of vector drawings, information graphics, logos, page, and screen compositions.

# Pre-reqs:

Or ECA243

IMT253

#### 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

And IMT132

# **IMT259 MUSIC SYNTHESIS II**

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This capstone course provides students with the skills and tools necessary to build advanced-level work in music synthesis. Upon completion, students will have completed three portfolio projects showcasing their skills in composing and arranging using synthesis, MIDI, and sequencing software.

# Pre-reqs:



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# **Business-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

#### 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

And IMT246

# 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:**



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# 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-regs:

IMT132

#### 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

# **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-regs:



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### **Business-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

#### 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

## 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-regs:



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### **Business-Information Tech**

**Computer Security** 

## NET121 INTRO TO COMP NETWORKING

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the architecture, structure, functions and components of the Internet and other computer networks. Students achieve a basic understanding of how networks operate and how to build simple local area networks (LAN), perform basic configurations for routers and switches, and implement Internet Protocol (IP). CTAG approved CTIT017, effective summer 2022 ITAG approved ITITN017, effective summer 2022 TAG approved OIT002, effective summer 2023

Pre-reqs:

#### 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

Or ECA146

NET120

And NET121

### NET137 CCNA Phase 2

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both IPv4 and IPv6 networks. CTAG approved CTIT018, effective summer 2022 ITAG approved ITITN018, effective summer 2022

### **Pre-reqs:**

**NET121** 



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### **Business-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:

**NET120** 

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

Or ECA145

NET120

And NET121

### 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-regs:

Or ECA244

NET244



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### **Business-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

**NET244** 

### 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** 

Can be Taken Concurrently

## NET256 CCNA Phase 3

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course describes the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. The course emphasizes network security concepts and introduces network virtualization and automation. Students learn how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation. CTAG approved CTIT019, effective summer 2022 ITAG approved ITITN019, effective summer 2022

### **Pre-reqs:**

**NET137** 



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### **Business-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

**NET220** 

## 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** 

### **Health and Human Services**

**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. CTAG approved STCJ001 effective Spring 2012

#### **Pre-regs:**



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### **Health and Human Services**

### **Criminal Justice**

### CIS124 POLICING

Credit Hours: 3 Contact 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-regs:

**CJS121** 

## 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** 

## CJS140 LAW ENFORCEMENT ACADEMY I

Credit Hours: 12 Contact Hours: 16 Lecture Hours: 8 Lab Hours: 8 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-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 



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### **Health and Human Services**

**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

## 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-regs:

**CJS121** 

## 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-regs:

CJS121



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### **Health and Human Services**

**Criminal Justice** 

### CIS240 LAW ENFORCEMENT ACADEMY II

Credit Hours: 12 Contact Hours: 16 Lecture Hours: 8 Lab Hours: 8 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-regs:

**CJS140** 

## PSC122 Intro Law and Legal System

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 criminal, civil, and administrative components of that system. Topics include the organization of the courts, the origins of law, the adversarial system, legal procedures, an introduction to legal ethics, and several principles of the civil law, including tort and contract law.

#### **Pre-reqs:**

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

## PSC123 Government & 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 attorneys, policy makers, and government employees, with emphases on the Ohio Code of Professional Responsibility and Ohio Ethics Law for public officials and employees. Topics include competency, confidentiality, conflicts of interest, financial disclosure, and impartiality.

#### Pre-regs:

Or Test & Score: ACT Reading - 18



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### **Health and Human Services**

## **Criminal Justice**

### PSC123 Government & 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 attorneys, policy makers, and government employees, with emphases on the Ohio Code of Professional Responsibility and Ohio Ethics Law for public officials and employees. Topics include competency, confidentiality, conflicts of interest, financial disclosure, and impartiality.

### Pre-reqs:

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102

#### PSC130 Intro to Public Administration

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This introductory course provides an overview of the theory and practice of public administration. The course reviews the history of public administration as a discipline, including the legal environment for public management and ethics. Topics include personnel, budgeting, and planning.

### Pre-regs:

#### **PSC140** Comparative Gov & Politics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the rich diversity of political life outside the United States. This course examines basic concepts, approaches to and comparisons of different political systems, including institutions and political processes, political cultures, ideologies, participation, and interest groups of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments.

## Pre-reqs:



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### **Health and Human Services**

**Criminal Justice** 

### PSC230 Intro to Political Thought

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course introduces students to the major concepts and themes of Western political thought.

### Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

## SSC201 Study Away: Experiential Lrng

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course will apply critical thinking skills, as well as academic knowledge and concepts, to real-life experiences by exposing students to communities, cultural activities, historical sites, agencies and/or institutions outside the traditional classroom setting and beyond the local community. Due to the nature of the subject matter and travel requirements, academic and eligibility standards may apply.

### Pre-reqs:

## **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.



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### **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-regs:

### DAS122 DENTAL ASSISTING RADIOGRAPHY

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 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:** 

## 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



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### **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-regs:

#### 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.

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** 

### 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 head and neck anatomy necessary for preparation for beginning technical studies of dental auxiliary procedures.

Pre-reqs:



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### **Health and Human Services**

**Dental Hygiene** 

### DAS129 Fund of the Dental Prof

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This course is an introduction to the fundamentals of working in a dental office as a Dental Practice Coordinator within the dental team. This course provides an introduction to infection control, dental health safety, medical and dental histories, HIPAA policy, communication skills, dental procedures, treatment options, and materials used. Aspects of treatment planning, restorative charting, periodontal charting, prevention techniques, and radiography as they relate to the role of a Dental Practice Coordinator are emphasized. Students must acquire a Healthcare provider CPR certification as a requirement in this course.

Pre-regs:

DAS130 Can be Taken Concurrently

#### DAS130 Dental Practice Coor I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on the application of dental software. It also introduces management of the dental office including dental office procedures and techniques, written, verbal, and electronic communications, dental software and computer use, dental insurance, introduction to CDT coding, inventory control, accounts receivable, accounts payable, recall systems, scheduling, marketing, and staff and patient management. Concepts of the business of dentistry as a service profession, legal and ethical issues are covered.

Pre-regs:

DAS129 Can be Taken Concurrently

## **DAS131** Dental Insurance

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will focus on dental insurance coding, insurance verification, preparing and submitting preauthorization to dental insurance companies, submitting dental claims, and treatment plan presentations. Scheduling and confirming appointments will be included with the treatment plan appointment and sequence of appointments. Tracking treatment progress and communicating with patients, the dental team, and insurance companies regarding financial arrangements will be part of the course. Finally, accepting and posting payments for treatment will be completed utilizing industry standard dental software.

## Pre-reqs:

**DAS130** 



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### **Health and Human Services**

**Dental Hygiene** 

#### DAS132 Dental Practice Coord II

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

This capstone course enhances the dental office experience permitting the student to serve as a non-paid dental practice coordinator in offices affiliated with Stark State College. Observation of dental practice functions as well as completing a variety of dental practice coordination tasks is part of this course. Students will participate in didactic instruction related to their experiences, employment strategies, interviewing techniques for the interviewer and interviewee, and work ethic. Management of medical and dental emergencies are emphasized. Students will create an office policy manual in this course.

Pre-regs:

**DAS130** 

## DAS225 Dental Morphology for EFDA

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will introduce EFDA students to the specific morphology associated with reproducing proper dental form and function during restorative dental procedures, while communicating appropriately with other dental professionals utilizing proper terminology.

**Pre-reqs:** 

## DAS226 EXPANDED DENTAL ASSISTING I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will cover basic concepts in head, neck and basic dental anatomy, terminology, tooth physiology/morphology to support 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-regs:



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### **Health and Human Services**

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### DAS227 EXPANDED DENTAL ASSISTING II

Credit Hours: 4 Contact Hours: 7 Lecture Hours: 1 Lab Hours: 6 Other Hours: 0

This course will serve to teach competency in the basic restorative procedures allowed to expanded function dental auxiliary candidates.

Pre-regs:

### DAS228 DIRECTED CLINICAL PRACTICE

Credit Hours: 5 Contact Hours: 13 Lecture Hours: 1 Lab Hours: 6 Other Hours: 6

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-regs:

**DAS225** 

And DAS226

And DAS227

### 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 morphology and physiology of occlusion.

Pre-regs:



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### **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-regs:

### 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-regs:

## **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-regs:



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### **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** 

### 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-regs:

**DHY122** 

## DHY131 FUND DENTAL HYGIENE PRAC

Credit Hours: 4 Contact Hours: 10 Lecture Hours: 1 Lab Hours: 9 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-regs:



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### **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

This course builds upon fundamentals to provide further study of dental hygiene practices including introduction to the dental hygiene process of care related to patient needs, management of medical/dental emergencies, health communication and dental specialties.

## Pre-reqs:

**DHY131** 

## 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-regs:

And DHY123

**DHY131** 

### 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:**



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### **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** 

#### 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

And DHY126

### **DHY223** Community Oral Health

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course focuses on program planning models, incorporation of research methods into program development and evaluation and offers practical application of community health concepts. Concepts of research design and methodology in community program planning are discussed. Learning experiences emphasize reading and reviewing scientific literature, understanding statistical reporting and the levels of public health prevention and administration. Assessing, planning, implementing and evaluating the oral health of various populations in a community setting are presented. Field experience required.

### Pre-reqs:



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### **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. Current advances in periodontal research and therapy is presented including oral-systemic connections.

### Pre-regs:

**DHY124** 

#### 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

And DHY121

And DHY132

## 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 as oral health indices and supplemental care procedures. It focuses on the incorporation of all phases of assessment and development of more complex dental hygiene care plans and case presentations focusing on individual patient care. Required lab 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:



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### **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** 

### DHY233 DENTAL HYGIENE THEO III

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

The course further explores treatment modalities and adjunct procedures. The course focuses on transitions to practice including principles of office management, jurisprudence, ethics and current issues in dental hygiene.

### Pre-regs:

DHY231

## 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-regs:



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### **Health and Human Services**

**Dental Hygiene** 

#### HTD221 HLTH INDEP STUDY-DENTL HYGIENE

Credit Hours: 1 Contact Hours: 10 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This independent study provides remediation of dental hygiene skills used in the treatment of patients with emphasis on patient management and effective communications. Students will be required to demonstrate competency in assigned skills and documentation to assure adequate knowledge and proficiency before continuation in the program.

Pre-regs:

#### HTD222 HLTH INDEP STUDY-DENTL HYGIENE

Credit Hours: 2 Contact Hours: 20 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This independent study provides remediation of dental hygiene skills used in the treatment of patients. Students will participate in supervised clinical patient care experiences which reinforce fundamentals, correlate with, and allow the application of dental procedures and concepts related to entry level dental hygiene theory. Special emphasis is placed on application of basic skills and professionalism. Students will be required to demonstrate competency in assigned skills and documentation to assure adequate knowledge and proficiency before continuing in the program.

Pre-regs:

## HTD223 HLTH INDEP STUDY-DENTL HYGIENE

Credit Hours: 3 Contact Hours: 30 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This independent study provides remediation of dental hygiene skills used in the treatment of patients with special focus on total patient care and treatment planning, and judgment and decision-making. Students will participate in 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. Students will be required to demonstrate competency in assigned skills and documentation to assure adequate knowledge and proficiency before continuing in the program.

**Pre-regs:** 



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### **Health and Human Services**

**Dental Hygiene** 

## HTD224 HLTH INDEP STUDY-DENTL HYGIENE

Credit Hours: 4 Contact Hours: 40 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This independent study provides remediation of dental hygiene skills used in the treatment of patients placing emphasis on self-evaluation, quality assurance, and the development of proficiency in implementing treatment plans to meet individual patient's oral health needs. Students will participate in clinical patient care experiences that correlate with and allow application of dental hygiene procedures and lecture concepts presented in Dental Hygiene Theory III. Students will be required to demonstrate competency in assigned skills and documentation to assure adequate knowledge and proficiency for continuation in the program.

Pre-regs:

### **Dietary Management**

## **DMA135** Food Oper Directed Practice

Credit Hours: 1 Contact Hours: 5 Lecture Hours: 0 Lab Hours: 5 Other Hours: 0

Under the supervision of a registered/licensed dietitian, registered dietetic technician, certified dietary manager or other approved foodservice professional, the student will complete 75 hours of directed practice in a foodservice setting and/or through approved alternate activities and assignments. The student will participate in a variety of functions of a foodservice operation with particular emphasis on safety, sanitation, and the flow of food throughout the operation. Working with the preceptor, the student will apply the knowledge gained from required prior or concurrent coursework.

Pre-regs:

NTR130 Can be Taken Concurrently

## **DMA145** Nutrition Mgmt Directed Prac

Credit Hours: 1 Contact Hours: 5 Lecture Hours: 0 Lab Hours: 5 Other Hours: 0

Under the supervision of a registered/licensed dietitian or registered dietetic technician, the student will complete 75 hours of directed practice in a health care setting and/or through approved alternate activities and assignments. The student will participate in a variety of functions for management of nutritional care and services in a health care setting. Working with the preceptor, the student will apply the knowledge gained from the previous and current coursework.

**Pre-reqs:** 

NTR121

And NTR122

Can be Taken Concurrently



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### **Health and Human Services**

**Dietary Management** 

#### DMA155 Dietary Systems Directed Pract

Credit Hours: 1 Contact Hours: 5 Lecture Hours: 0 Lab Hours: 5 Other Hours: 0

Under the supervision of a registered/licensed dietitian, registered dietetic technician, certified dietary manager or other approved foodservice professional, the student will complete 75 hours of directed practice in a foodservice setting and/or through approved alternate activities and assignments. The student will participate in a variety of functions of a foodservice operation with particular emphasis on management responsibilities for the food system. Working with the preceptor, the student will apply the knowledge gained from required prior and concurrent coursework.

Pre-reqs:

DTR228 Can be Taken Concurrently

#### DTR121 FOOD SCIENCE PRINCIPLES

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The course provides an overview of fundamental biological, chemical and physical scientific principles associated with the study of foods. Topics include food composition and functional properties, food additives and regulations/laws, food safety and microbiology, toxicology, food processing, food engineering, food biotechnology, sustainability, product development, and sensory evaluation. In addition, the coursework includes discussion of the role of food technology in world health, environmental, and nutritional concerns. CTFSC001 effective fall 20018

Pre-regs:

## DTR122 LIFE CYCLE NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Normal nutritional needs for individuals throughout the life cycle from conception through end of life are examined, including factors that impact nutritional status. Specialized needs and interventions for key nutrition-related conditions or diseases are also discussed.

Pre-reqs:

NTR121



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### **Health and Human Services**

**Dietary Management** 

#### DTR223 Med Nutr/Prof Directed Prac

Credit Hours: 2 Contact Hours: 10 Lecture Hours: 0 Lab Hours: 0 Other Hours: 10

Under the supervision of a registered/licensed dietitian or registered, dietetic technician, the student will complete at least 160 hours of directed practice in a health care setting and/or through approved alternate activities and assignments. The student will participate in the Nutrition Care Process, including required data collection and documentation for patient care. The student will collaborate with others in appropriate interventions for a variety of diseases and conditions. The student will also participate in an assortment of activities to develop and demonstrate professionalism.

Pre-reqs:

DTR236 Can be Taken Concurrently

#### DTR225 COMMUNITY NUTRITION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Explore the concept of community, the role of nutrition in health promotion and perspectives for resolving community nutrition problems, including nutrition education. The role of the community needs assessment is discussed in the context of program planning, intervention, and evaluation. The course includes a review of community nutrition assistance programs for various life stages, determinants of health outcomes, measurement of nutrition and health status, food and nutrition policy and legislative issues, and management of community programs.

#### Pre-regs:

NTR121

## DTR226 COMM NUTRITION DIR PRACTICE

Credit Hours: 2 Contact Hours: 10 Lecture Hours: 0 Lab Hours: 0 Other Hours: 10

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 and/or through approved alternate activities and assignments. The student will observe, participate and demonstrate competence for standards related to food, nutrition and professionalism within diverse community settings. Student learning activities may include funding and policy impacts, nutrition education, individual and population health, and food security.

**Pre-reqs:** 

DTR225

Can be Taken Concurrently



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### **Health and Human Services**

**Dietary Management** 

### DTR228 DIETARY SYSTEMS

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course utilizes a foodservice systems approach to explore the interactions of a variety of processes, controls, inputs, and environmental factors in the effective management of a food operation. Consideration is given to factors, such as equipment selection, kitchen layout, and the oversight of procurement, production, distribution, sustainability, safety, and sanitation. Principles of management theories and functions of the food operation manager are examined, including hiring, training, scheduling, controlling budgets, and monitoring quality and customer satisfaction.

Pre-regs:

#### DTR229 PROFESSIONAL DIETETICS

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The capstone course in the Dietetic Technician program integrates a variety of topics to promote career readiness, professionalism, and preparedness for the Commission on Dietetic Registration credential exam. Emphasis is placed on ethics; leadership characteristics and self-assessment; professional scope of practice and advocacy; and career preparation in dietetics and healthcare.

**Pre-reqs:** 

## DTR231 FOODSERVICE DIRECTED PRACTICE

Credit Hours: 2 Contact Hours: 10 Lecture Hours: 0 Lab Hours: 0 Other Hours: 10

Under the supervision of a registered/licensed dietitian or other qualified foodservice preceptor, the dietetic technician 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. During this directed practice the student will work with the Foodservice Director and apply the knowledge and skills that have been learned from previous coursework.

Pre-reqs:

And DTR228

NTR130 And NTR130L Can be Taken Concurrently



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### **Health and Human Services**

## **Dietary Management**

### DTR235 Medical Nutrition Therapy I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Students will develop an understanding of the steps of the Nutrition Care Process (assessment, diagnosis, intervention, and monitoring and evaluation), which will be systematically utilized to explore nutrition-related problems. Coursework includes the nutritional implications of pathological conditions and alterations to diet for specific health issues or disorders, including but not limited to diseases of energy imbalance, cardiovascular system, upper gastrointestinal tract, and the endocrine system.

### Pre-reqs:

NTR122

## DTR236 Medical Nutrition Therapy II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

The steps of the Nutrition Care Process (assessment, diagnosis, intervention, and monitoring and evaluation) will be systematically utilized to explore nutrition-related problems. Coursework includes nutritional implications of pathological conditions and alterations to diet for specific health issues or disorders, including but not limited to diseases or disorders of the lower gastrointestinal tract, gallbladder, liver, hematological, renal and respiratory systems. Additional topics include nutritional management of cancers, musculoskeletal, neurological, metabolic disorders, and the use of enteral and parenteral support as a means of nutritional intervention.

#### **Pre-reqs:**

## NTR121 Nutrition for Health

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. TAG approved OHL016, effective Summer 2017.

## Pre-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 



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### **Health and Human Services**

**Dietary Management** 

### NTR122 Intro Medical Nutr Therapy

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course builds on foundation knowledge of basic nutrition fundamentals and introduces skills for basic medical nutrition therapy, as it relates to nutritional screening, client interviewing and data gathering, nutrition-related calculations, modification of selected diet plans, implementing nutrition care and basic nutrition education, and documentation of relevant nutrition data. Federal and state regulations, including client/patient rights and documentation compliance, as it relates to nutritional care, will be reviewed.

Pre-regs:

NTR121

### NTR130 Food Operations

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course integrates the principles of foods, foodservice operations, and food safety. A foundation of a variety of food categories is presented, including basic food science, classification, purchasing, preparation, and storage. Managerial accountability for menu planning, procurement, receiving, storage, and quantity production of food is examined. ServSafe coursework is included, reflecting managerial oversight of food safety and sanitation through all phases of the food operation. The course incorporates the National Restaurant Association ServSafe Food Protection Manager Certification Examination.

Pre-regs:

## NTR130L Food Operations Lab

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This lab coincides with the Food Operations course, NTR130 for Dietetic Technician majors only. The student will prepare foods using safety and sanitation methods learned in lecture and apply fundamental concepts of foods and recipe management. Basic food science principles will be discussed in the context of various food groups. Food preparation to include all major food categories, cultural food meal, and a basic modified diet for health.

Pre-reqs:

NTR130 Can be Taken Concurrently

Fire and EMS



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### **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. MTAG approved course CTEMS 002, effective fall 2016

## Pre-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102

### EMS122 PARAMEDICI

Credit Hours: 7 Contact Hours: 9 Lecture Hours: 6 Lab Hours: 3 Other Hours: 0

This course is the first course in a four-course sequence. This course follows the objectives for paramedic education according to the Ohio Administrative Code 4765 and includes the knowledge and skills required to perform patient assessment, airway management, pharmacology, fluid administration, and understand medico-legal issues. Students will learn management of medical emergencies by performing rapid assessment, interpretation of data and advanced intervention for patients of all ages from neonates to geriatric. effective Summer 2016: STEMS004

## Pre-reqs:

BIO101

And EMS121

And EMS124

Can be Taken Concurrently



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### **Health and Human Services**

Fire and EMS

### EMS124 Paramedic I Clinical

Credit Hours: 1 Contact Hours: 6 Lecture Hours: 0 Lab Hours: 6 Other Hours: 0

This course is a co-requisite to Paramedic I. It consists of the clinical and field internship component relative to the course content and skills of Paramedic I, EMS122, including but not limited to medication administration, initiation of IV therapy and advanced airway techniques. CTAG CTEMS004 approved, effective summer 2020

### Pre-reqs:

And BIO101

EMS121

And EMS122

Can be Taken Concurrently

#### EMS221 PARAMEDICII

Credit Hours: 7 Contact Hours: 9 Lecture Hours: 6 Lab Hours: 3 Other Hours: 0

This course is the second course in a four-course sequence. This course 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 cardiac emergencies. Students will learn rhythm interpretation and dysrhythmia treatment for patients of all ages from neonates to geriatric. effective Summer 2016: STEMS004

### Pre-regs:

**EMS122** 

And EMS124

And EMS223

Can be Taken Concurrently

### EMS222 PARAMEDIC III

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 4 Lab Hours: 3 Other Hours: 0

This course is the third course in a four-course sequence. This course 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 trauma. Students will learn management of traumatic emergencies by performing rapid assessment, interpretation of data and advanced intervention for patients of all ages from neonates to geriatric. effective Summer 2016: CTEMS004

## Pre-reqs:

EMS221

And EMS223



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### **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. It consists of the clinical and field internship component relative to the course content and skills of Paramedic II, EMS221, including but not limited to cardiac monitoring and ECG interpretation, advanced airway skills and advanced trauma management. CTAG CTEMS004 approved, effective summer 2020

### Pre-reqs:

**EMS122** 

And EMS124

And EMS221

Can be Taken Concurrently

#### EMS224 PARAMEDIC IV

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 5 Lab Hours: 3 Other Hours: 0

This course is the fourth course in a four-course sequence. This course 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. This course places emphasis on team leadership in the clinical and field setting. Demonstration of terminal competencies and preparation for paramedic psychomotor competency testing is included. effective Summer 2016: CTEMS004

### Pre-regs:

**EMS222** 

And EMS225 And EMS226 Can be Taken Concurrently

## EMS225 Paramedic IV Clinical

Credit Hours: 1 Contact Hours: 6 Lecture Hours: 0 Lab Hours: 6 Other Hours: 0

This capstone course is a co-requisite to Paramedic IV. It consists of the clinical and field internship component relative to course content and skills of Paramedic IV, EMS224. Focus is on evaluation of team leadership in the field setting. CTAG CTEMS004 approved, effective summer 2020

### Pre-regs:

EMS222

And EMS224

Can be Taken Concurrently

And EMS226



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### **Health and Human Services**

Fire and EMS

#### EMS226 Paramedic III Clinical

Credit Hours: 1 Contact Hours: 6 Lecture Hours: 0 Lab Hours: 6 Other Hours: 0

This course is a co-requisite to EMS222 Paramedic III. It consists of the clinical and field internship component relative to the course content and skills of EMS222 Paramedic III, including but not limited to, cardiac monitoring and ECG interpretation, advanced airway skills, and advanced trauma management. CTAG CTEMS004 approved, effective summer 2020

### Pre-reqs:

EMS221

And EMS222

Can be Taken Concurrently

And EMS223

### FST128 VOLUNTEER FIREFIGHTER

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0.5 Lab Hours: 1.5 Other Hours: 0

### Pre-regs:

### FST129 FIREFIGHTER 1

Credit Hours: 7 Contact Hours: 11 Lecture Hours: 5 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 CTFF002, effective Spring 2018..

### Pre-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 



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### **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 and EMS service and their employees while carrying out their functions. Courtroom presentations, procedures, and case studies will be included.

### Pre-reqs:

#### 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 CTFF003, effective Spring 2018.

#### **Pre-reqs:**

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 

## FST229 Firefighter 1 Transition

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 5 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:**

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: IDS Transfer Prof/Placement - 3



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### **Health and Human Services**

Fire and EMS

### FST229 Firefighter 1 Transition

Credit Hours: 6 Contact Hours: 8 Lecture Hours: 5 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:

Or Test & Score: NextGen Accuplacer Reading - 246

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

FST128 And IDS102

## FST230 Firefighter 2 Transition

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 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

FST129

And FST229

### **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-regs:



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### **Health and Human Services**

**Health Information** 

## HIT101 Intro to Medical Billing

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course helps develop a broader understanding of professional billing careers by delving into the intricacies of Managed Care Organizations and the differences among them. The course covers the foundations of insurance, billing, coding, and reimbursement.

Pre-regs:

### HIT102 Medical Claims Methodology

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course focuses on the completion of medical claims forms and resolution of claim rejection using government billing guidelines for inpatient, outpatient, and physician services with a dedicated focus on Medicare, Medicaid, TRICARE, and workers compensation claim submission using the UB-04 or CMS-1500 billing forms. The student will understand the appeal process, Explanation of Benefits form, Electronic Remittance Advice form, Medicare Fee schedule, and revenue based hospital billing. The course requires the use of problem-solving and communication skills to answer questions and to write letters of appeal for denied claims. Students will be able to accurately complete claims forms without omission of data.

#### Pre-regs:

HIT101

## 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. CTHIM001 effective Spring 2016

Pre-reqs:

HIT123

Can be Taken Concurrently



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### **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-regs:

HIT121

#### 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. CTAG approved - CTHIM002 effective Spring 2012.

#### **Pre-reqs:**

Or HIT121

**HIT230** 

Can be Taken Concurrently

# 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

HIT121



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## **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/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-regs:

**BIO222** 

And HIT124

## 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:

HIT124

And HIT224

Can be Taken Concurrently

## 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** 



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## **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-regs:

HIT222

Can be Taken Concurrently

## HIT226 PROFESSIONAL PR I/SEM I

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 1 Lab Hours: 7 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:** 

## HIT227 PROFESSIONAL PR II/SEMII

Credit Hours: 2 Contact Hours: 8 Lecture Hours: 1 Lab Hours: 7 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-regs:



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## **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-regs:

Or CIS126

Or ECA180

**HIT224** 

And ITD122

## 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:

### HIT231 VIRTUAL PROF. PRAC LAB

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This virtual 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** 



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## **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 spring 2018

## Pre-regs:

**HIT121** 

#### 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

## **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



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## **Health and Human Services**

**Human Services** 

## 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

## 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-regs:

SWK125

## 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** 



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## **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

#### 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-regs:

SWK125

## HJS250 Human Serv-Justice Prac/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 of the student into a selected, relevant agency for an educationally supervised learning experience. Students will complete 210-220 hours at the placement site (220 hours required for the State of Ohio's Chemical Dependency Counselor Assistant certification, 210 hours required for all other majors). The required 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.

#### **Pre-reqs:**

Or CDC222

**CJS240** 

Or GLS123

Or SWK130



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## **Health and Human Services**

**Human Services** 

#### SWK121 INTRO TO SOCIAL WELFARE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an overview of the social welfare system spanning the last two hundred years. The dynamics of the various social, political, and philosophical ideas are examined as they have affected the social welfare system in the United States and social work as a profession. Students become familiar with the structure and function of current social service delivery systems. Students are required to volunteer for 15 hours in a social service setting and complete required documentation. Students are required to complete a background check during the semester in which the class is taken. TAG OSS030 approved Spring 2012.

## Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: ACT Composite - 22

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 2

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102

#### 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-regs:

SWK121

#### SWK125 SUBSTANCE ABUSE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides students with an understanding of the impact of alcohol and drugs on American society and the role of the social service professional in educating, supporting and assisting clients with treatment options/resources. Topics include common stereotypes, myths, attitudes, interventions, treatment options and co-dependency. To successfully complete this course, students are required to attend two (2) 12-step meetings and complete the written assignments related to the meetings. CTAG approved CTBH002, effective summer 2022



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## **Health and Human Services**

#### **Human Services**

## SWK125 SUBSTANCE ABUSE

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides students with an understanding of the impact of alcohol and drugs on American society and the role of the social service professional in educating, supporting and assisting clients with treatment options/resources. Topics include common stereotypes, myths, attitudes, interventions, treatment options and co-dependency. To successfully complete this course, students are required to attend two (2) 12-step meetings and complete the written assignments related to the meetings. CTAG approved CTBH002, effective summer 2022

## Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: ACT Composite - 22

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

IDS102

#### SWK126 HUMAN BEHAVIOR & SOC ENV

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides a comprehensive study of human behavior from a life span perspective. A systems approach is used with special attention to the role of the social service professional and the social service system.

## Pre-reqs:

Or Test & Score: ACT Reading - 18

Or Test & Score: ACT Composite - 22

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 2

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 



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## **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-regs:

#### 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:

And ENG124

SWK121



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## **Health and Human Services**

**Human Services** 

## SWK225 VICTIM AND CRISIS INTERVENTION

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Course provides students with the basic understanding of victimization and theories and practice of intervention. Issues such as risk factors, legal issues, and intervention strategies of child abuse, spousal abuse, elder abuse and co-dependency will be introduced.

## Pre-reqs:

**ENG124** 

#### 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:** 

## SWK230 SOCIAL SERV FOR ELDERLY

Credit Hours: 3 Contact Hours: 13 Lecture Hours: 3 Lab Hours: 0 Other Hours: 10

This course provides information on national, state, and local social services that meet the needs of the elderly, their families, their communities and the institutions serving them and their families. Includes an examination of current societal policy and programs to meet the needs of the elderly and a basic orientation to the roles of various personnel in agencies. Students are required to complete 10 observation hours in settings that serve the elderly.

Pre-regs:

ENG124

**Massage Therapy** 



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## **Health and Human Services**

**Massage Therapy** 

## MAS121 MASSAGE THERAPY I

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 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-regs:

#### MAS122 MASSAGE THERAPY II

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 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** 

And MAS123

## MAS123 MASSAGE THERAPY A & P I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 Other Hours: 0

Guided study of human anatomy and physiology including the eleven body systems with an emphasis on the primary components and general functions of each system as it applies to manual therapy practitioners.

Pre-reqs:



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## **Health and Human Services**

**Massage Therapy** 

## MAS124 MASSAGE THERAPY A & P II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Guided study of Human Pathophysiology with an emphasis on massage specific information. The eleven body systems will be studied with specific disorders a massage therapist may encounter in their practice. Indications and contraindications for treatment will be discussed.

## Pre-regs:

And BIO122 Can be Taken Concurrently
BIO123 Can be Taken Concurrently
MAS123

## 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

Or BIO123

And MAS226

Can be Taken Concurrently

## MAS224 MASSAGE THERAPY III

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

In this course the students continue to study the practice of Massage Therapy in both a general and clinical setting.

## Pre-regs:

**MAS121** 



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## **Health and Human Services**

**Massage Therapy** 

## MAS225 MASSAGE THERAPY IV

Credit Hours: 2 Contact Hours: 3 Lecture Hours: 1 Lab Hours: 2 Other Hours: 0

In this course students continue to study the practice of Massage Therapy in both a general and clinical setting.

## Pre-reqs:

**MAS121** 

## 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** 

And MAS225

## 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** 



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## **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** 

## 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

## 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-regs:

**MAS121** 

## **Medical Assisting**



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## **Health and Human Services**

**Medical Assisting** 

#### MAT100 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 communication skills and the clinical techniques employed by the medical assistant. Pathophysiology and medications are presented as related procedures. Electronic Health Records will be implemented throughout the course.

Pre-reqs:

MAT101 Can be Taken Concurrently

### MAT101 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.CTAG approved, CTMMS001, effective summer 2017

Pre-regs:

MAT100 Can be Taken Concurrently

## MAT102 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, EKG monitoring, and patient communication and education. Proper documentation of clinical procedures is covered using electronic medical records. Pathophysiology is presented as related to the procedures. Electronic Health Records will be implemented throughout the course.

Pre-reqs:

MAT100 Can be Taken Concurrently



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## **Health and Human Services**

**Medical Assisting** 

#### MAT103 Medical Law and Ethics

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 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-regs:

## MAT200 Med Lab Proc for Med Asstg

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course introduces the student to basic medical laboratory techniques used in the physician's office. Our lab is run in compliance with OSHA/CLIA standards. Laboratory tests taught represent all departments of a clinical lab and include spirometry and EKG. Electronic Health Records will be implemented throughout the course.

#### **Pre-reqs:**

**MAT102** 

## **MAT201** Insurance for Medical Asstg

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on developing knowledge of private, government and managed care insurances. Students will learn to code and complete electronic claim forms from CPT and ICD codebooks. Students will learn basic bookkeeping terminology, and post payments from Remittance Advice forms. This course covers risk management for reimbursement issues, following up on unpaid claims, and appealing disallowed claims. Electronic Health Records will be implemented in the course.

Pre-regs:

MAT102

Can be Taken Concurrently



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## **Health and Human Services**

## **Medical Assisting**

#### MAT202 Pharmacolog/Medications

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 1 Lab Hours: 4 Other Hours: 0

This course focuses on specific drug classifications including the 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. Electronic Health Records will be implemented throughout this course.

## Pre-reqs:

MAT102 Can be Taken Concurrently

## **MAT204** Medical Office Management

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on creating a Policy and Procedure Manual that includes management principles, policies and procedures, financial management, marketing the practice, human relations and safety and disaster plans.

#### **Pre-reqs:**

**MAT200** 

And MAT201

And MAT203 Can be Taken Concurrently
And MAT205 Can be Taken Concurrently
And MAT206 Can be Taken Concurrently

## MAT205 Medical Assisting Seminar

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course will teach students how to prepare resumes, write cover letters and develop interview skills. Students will also prepare for the practicum.

## Pre-regs:

**MAT200** 

And MAT201

And MAT203 Can be Taken Concurrently
And MAT204 Can be Taken Concurrently
And MAT206 Can be Taken Concurrently



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## **Health and Human Services**

**Medical Assisting** 

#### MAT206 Medical Assisting Practicum

Credit Hours: 2 Contact Hours: 14 Lecture Hours: 0 Lab Hours: 14 Other Hours: 0

The student is placed in a medical facility for 210 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:

**MAT200** 

And MAT201

And MAT203 Can be Taken Concurrently
And MAT204 Can be Taken Concurrently
And MAT205 Can be Taken Concurrently

## 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** 

## 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-regs:

**MAT121** 



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## **Health and Human Services**

**Medical Assisting** 

## 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-regs:

**MAT228** 

#### 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:**

## 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-regs:

Or Test & Score: ACT Reading - 18

Or Test & Score: Accuplacer Reading - 070

Or Test & Score: Compass Reading - 080

Or Test & Score: GED Reasoning Through Lang Art - 1

Or Test & Score: IDS Transfer Prof/Placement - 3

Or Test & Score: NextGen Accuplacer Reading - 244

Or Test & Score: Reading Proficiency - 3

Or Test & Score: SAT Verbal - 480

**IDS102** 



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## **Health and Human Services**

**Medical Lab** 

#### HTD213 HLTH INDEP STUDY-MED LAB

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This independent study provides remediation of medical laboratory procedures used in the clinical laboratory. Students enrolled in the independent study will review and practice previously completed competencies. Students will be required to demonstrate competency in assigned skills to assure adequate knowledge and proficiency before readmission into the program and/or clinical setting.

Pre-regs:

#### MLT121 FUNDAMENTALS OF LAB TECH

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 1 Lab Hours: 3 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 Summer 2018

**Pre-reqs:** 

## 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** 



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## **Health and Human Services**

**Medical Lab** 

#### MLT123 HEMATOLOGY I

Credit Hours: 3 Contact Hours: 4 Lecture Hours: 2 Lab Hours: 2 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-regs:

#### MLT124 HEMATOLOGY II

Credit Hours: 3 Contact Hours: 5 Lecture Hours: 2 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-regs:

**MLT123** 

## 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** 



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## **Health and Human Services**

#### **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-regs:

#### MLT222 CLINICAL CHEMISTRY

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 3 Lab Hours: 3 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

Or BIO123

And CHM243

And MLT121

And MLT122

## MLT223 CLINICAL MICROBIOLOGY

Credit Hours: 5 Contact Hours: 9 Lecture Hours: 3 Lab Hours: 6 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.

Can be Taken Concurrently

## Pre-reqs:

BIO221

And MLT126



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## **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 And MLT222

**MLT223** 

#### 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-regs:

MLT225 Can be Taken Concurrently
And MLT227 Can be Taken Concurrently

## 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** 

And MLT225 Can be Taken Concurrently
And MLT226 Can be Taken Concurrently

## **Nursing**



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## **Health and Human Services**

**Nursing** 

## HTD201 HLTH INDEP STUDY-Surg Tech

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This independent study provides remediation of surgical technology skills used in the surgical technology laboratory and clinical setting. Students enrolled in the independent study will review and practice previously completed competencies. Students will be required to demonstrate competency in assigned skills to assure knowledge and proficiency before readmission into the program and/or clinical setting.

## Pre-reqs:

## **NSG100** Fund Concepts Lifespan Lecture

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an overview of fundamental concepts important to the practice of nursing including those related to patient-centered nursing, the healthcare environment and professional nursing practice. Includes care of patients with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lab and clinical co-requisites and successfully complete all components. CTADNUR002 effective spring 2018

#### **Pre-reqs:**

And NSG100C Can be Taken Concurrently
 NSG100L Can be Taken Concurrently

And NSG101 Can be Taken Concurrently

## NSG100C Fund Concept Lifespan Clinical

Credit Hours: 2 Contact Hours: 6 Lecture Hours: 0 Lab Hours: 6 Other Hours: 0

This course provides an overview of fundamental concepts important to the practice of nursing including those related to patient-centered nursing, the healthcare environment and professional nursing practice. Includes care of patients with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lab and lecture co-requisites and successfully complete all components.

## Pre-reqs:

NSG100 Can be Taken Concurrently
And NSG100L Can be Taken Concurrently
And NSG101 Can be Taken Concurrently



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## **Health and Human Services**

**Nursing** 

## **NSG100L Fund Concepts Lifespan Lab**

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This course provides an overview of fundamental concepts important to the practice of nursing including those related to patient-centered nursing, the healthcare environment and professional nursing practice. Includes care of patients with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lecture and clinical co-requisites and successfully complete all components.

## Pre-reqs:

NSG100 Can be Taken Concurrently
And NSG100C Can be Taken Concurrently
And NSG101 Can be Taken Concurrently

## **NSG101** Clinical Reason Curr Practice

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the learner to clinical reasoning used in nursing. In this course the student learns to use critical thinking skills and strategies that underscore the thinking represented in the nursing process as well as dealing with aspects of the healthcare system for safe practice in the current healthcare environment. This course forms the basis for the thinking processes applied throughout all nursing courses.

## Pre-regs:

NSG100	Can be Taken Concurrently
And NSG100C	Can be Taken Concurrently
And NSG100L	Can be Taken Concurrently
Or NSG122	Can be Taken Concurrently
And NSG122C	Can be Taken Concurrently
And NSG122L	Can be Taken Concurrently
Or NSG123	Can be Taken Concurrently
And NSG123C	Can be Taken Concurrently
And NSG123L	Can be Taken Concurrently



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## **Health and Human Services**

**Nursing** 

## **NSG121** Concept Nur Care Adult Patient

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course builds on fundamentals for the acquisition and application of concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lab and clinical co-requisites and successfully complete all components. CTADNUR002 effective spring 2018

## Pre-reqs:

And BIO121

Or BIO123

And NSG100

And NSG100C

And NSG100L

And NSG101

And NSG121C Can be Taken Concurrently

NSG121L Can be Taken Concurrently

## **NSG121C Concept Nur Care Adult Clinic**

Credit Hours: 1.5 Contact Hours: 4.5 Lecture Hours: 0 Lab Hours: 4.5 Other Hours: 0

This course builds on fundamentals for the acquisition and application of concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lab and lecture co-requisites and successfully complete all components.

## Pre-regs:

And BIO121

Or BIO123

And NSG100

And NSG100C

And NSG100L

And NSG101

NSG121 Can be Taken Concurrently

And NSG121L Can be Taken Concurrently



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## **Health and Human Services**

**Nursing** 

## NSG121L Concept Nur Adult Patient Lab

Credit Hours: 0.5 Contact Hours: 1.5 Lecture Hours: 0 Lab Hours: 1.5 Other Hours: 0

This course builds on fundamentals for the acquisition and application of concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lecture and clinical co-requisites and successfully complete all components.

## Pre-reqs:

And BIO121

Or BIO123

And NSG100

And NSG100C

And NSG100L

And NSG101

NSG121 Can be Taken Concurrently
And NSG121C Can be Taken Concurrently

### NSG122 Transition Paramedic Lecture

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

The course builds on the existing knowledge of the paramedic and provides an overview of fundamental concepts important to the practice of nursing including those related to patient-centered nursing, the healthcare environment, and professional nursing practice. It also provides the acquisition and concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lab and clinical co-requisites and successfully complete all components.

### Pre-regs:

And NSG101 Can be Taken Concurrently
And NSG122C Can be Taken Concurrently
NSG122L Can be Taken Concurrently

#### NSG122C Trans for Paramedic Clinical

Credit Hours: 1.5 Contact Hours: 4.5 Lecture Hours: 0 Lab Hours: 4.5 Other Hours: 0

The course builds on the existing knowledge of the paramedic and provides an overview of fundamental concepts important to the practice of nursing including those related to patient-centered nursing, the healthcare environment, and professional nursing practice. It also provides the acquisition and concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lecture and clinical co-requisites and successfully complete all components.



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## **Health and Human Services**

**Nursing** 

#### NSG122C Trans for Paramedic Clinical

Credit Hours: 1.5 Contact Hours: 4.5 Lecture Hours: 0 Lab Hours: 4.5 Other Hours: 0

The course builds on the existing knowledge of the paramedic and provides an overview of fundamental concepts important to the practice of nursing including those related to patient-centered nursing, the healthcare environment, and professional nursing practice. It also provides the acquisition and concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lecture and clinical co-requisites and successfully complete all components.

## Pre-regs:

And NSG101 Can be Taken Concurrently
NSG122 Can be Taken Concurrently
And NSG122L Can be Taken Concurrently

#### NSG122L Transition for Paramedic Lab

Credit Hours: 0.5 Contact Hours: 1.5 Lecture Hours: 0 Lab Hours: 1.5 Other Hours: 0

This course builds on fundamentals for the acquisition and application of concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lecture and clinical co-requisites and successfully complete all components.

## Pre-regs:

And NSG101 Can be Taken Concurrently
NSG122 Can be Taken Concurrently
And NSG122C Can be Taken Concurrently

## NSG123 Transition for LPN Lecture

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

The course builds on the existing knowledge of the LPN with a focus on the transition from LPN practice to RN practice. It also provides the acquisition of additional concepts and application of concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lab and clinical co-requisites and successfully complete all components.

## Pre-reqs:

And NSG101	Can be Taken Concurrently
And NSG123C	Can be Taken Concurrently
NSG123L	Can be Taken Concurrently



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## **Health and Human Services**

**Nursing** 

#### **NSG123C** Transitiion for LPN Clinical

Credit Hours: 1.5 Contact Hours: 4.5 Lecture Hours: 0 Lab Hours: 4.5 Other Hours: 0

The course builds on the existing knowledge of the LPN with a focus on the transition from LPN practice to RN practice. It also provides the acquisition of additional concepts and application of concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lab and lecture co-requisites and successfully complete all components.

## Pre-reqs:

And NSG101 Can be Taken Concurrently
NSG123 Can be Taken Concurrently
And NSG123L Can be Taken Concurrently

#### **NSG123L** Transition for LPN Lab

Credit Hours: 0.5 Contact Hours: 1.5 Lecture Hours: 0 Lab Hours: 1.5 Other Hours: 0

The course builds on the existing knowledge of the LPN with a focus on the transition from LPN practice to RN practice. It also provides the acquisition of additional concepts and application of concepts of nursing applied to the care of patients experiencing uncomplicated conditions with a focus on wellness and health promotion. Application of knowledge and skills occurs in the nursing laboratories and clinical settings. Students must register for the lecture and clinical co-requisites and successfully complete all components.

## Pre-regs:

And NSG101 Can be Taken Concurrently
NSG123 Can be Taken Concurrently
And NSG123C Can be Taken Concurrently

#### **NSG141** Concept Patient Mental Lecture

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 1.5 Lab Hours: 0 Other Hours: 0

This course builds on the first semester courses to further refine the concepts of nursing practice with application to the care of patients with conditions related to mental health issues. Application of knowledge and skills occurs in the nursing laboratories and a variety of mental health facilities. Students must register for the lab and clinical co-requisites and successfully complete all components.

## Pre-reqs:

And BIO121

Or BIO123

And NSG100

And NSG100C

And NSG100L



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## **Health and Human Services**

**Nursing** 

#### **NSG141** Concept Patient Mental Lecture

Credit Hours: 1.5 Contact Hours: 1.5 Lecture Hours: 1.5 Lab Hours: 0 Other Hours: 0

This course builds on the first semester courses to further refine the concepts of nursing practice with application to the care of patients with conditions related to mental health issues. Application of knowledge and skills occurs in the nursing laboratories and a variety of mental health facilities. Students must register for the lab and clinical co-requisites and successfully complete all components.

## Pre-reqs:

Or NSG122

And NSG122C

And NSG122L

Or NSG123

And NSG123C

And NSG123L

And NSG141C NSG141L Can be Taken Concurrently

Can be Taken Concurrently

## **NSG141C Concept Patient Mental Clinic**

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This course builds on the first semester courses to further refine the concepts of nursing practice with application to the care of patients with conditions related to mental health issues. Application of knowledge and skills occurs in the nursing laboratories and a variety of mental health facilities. Students must register for the lab and lecture co-requisites and successfully complete all components.

## Pre-regs:

And BIO121

Or BIO123

And NSG100

And NSG100C

And NSG100L

Or NSG122

And NSG122C

And NSG122L

Or NSG123

And NSG123C

And NSG123L

NSG141

Can be Taken Concurrently



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## **Health and Human Services**

**Nursing** 

#### **NSG141C** Concept Patient Mental Clinic

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This course builds on the first semester courses to further refine the concepts of nursing practice with application to the care of patients with conditions related to mental health issues. Application of knowledge and skills occurs in the nursing laboratories and a variety of mental health facilities. Students must register for the lab and lecture co-requisites and successfully complete all components.

## Pre-reqs:

And NSG141L

Can be Taken Concurrently

## **NSG141L** Concept Patient Mental Lab

Credit Hours: 0.5 Contact Hours: 1.5 Lecture Hours: 0 Lab Hours: 1.5 Other Hours: 0

This course builds on the first semester courses to further refine the concepts of nursing practice with application to the care of patients with conditions related to mental health issues. Application of knowledge and skills occurs in the nursing laboratories and a variety of mental health facilities. Students must register for the lecture and clinical co-requisites and successfully complete all components.

## Pre-regs:

And BIO121

Or BIO123

And NSG100

And NSG100C

And NSG100L

Or NSG122

And NSG122C

And NSG122L

Or NSG123

And NSG123C

And NSG123L

NSG141 Can be Taken Concurrently

And NSG141C Can be Taken Concurrently



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## **Health and Human Services**

**Nursing** 

#### NSG221 Concept Repro-Devel Family Lec

Credit Hours: 2.5 Contact Hours: 2.5 Lecture Hours: 2.5 Lab Hours: 0 Other Hours: 0

This course builds on the previous nursing courses to further refine and apply the concepts of nursing practice in the care of the reproducing and developing family. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings in maternal/newborn and pediatric environments. Students must register for the lab and clinical corequisites and successfully complete all components.

## Pre-regs:

And NSG141

And NSG141C

And NSG141L

And NSG221C Can be Taken Concurrently

NSG221L Can be Taken Concurrently

## NSG221C Concept Repro-Devel Fam Clinic

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This course builds on the previous nursing courses to further refine and apply the concepts of nursing practice in the care of the reproducing and developing family. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings in maternal/newborn and pediatric environments. Students must register for the lab and lecture corequisites and successfully complete all components.

## Pre-reqs:

And NSG141

And NSG141C

And NSG141L

NSG221 Can be Taken Concurrently

And NSG221L Can be Taken Concurrently

## NSG221L Concept Repro-Devel Fam Lab

Credit Hours: 0.5 Contact Hours: 1.5 Lecture Hours: 0 Lab Hours: 1.5 Other Hours: 0

This course builds on the previous nursing courses to further refine and apply the concepts of nursing practice in the care of the reproducing and developing family. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings in maternal/newborn and pediatric environments. Students must register for the lecture and clinical corequisites and successfully complete all components.

## Pre-regs:

And NSG141



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## **Health and Human Services**

**Nursing** 

## NSG221L Concept Repro-Devel Fam Lab

Credit Hours: 0.5 Contact Hours: 1.5 Lecture Hours: 0 Lab Hours: 1.5 Other Hours: 0

This course builds on the previous nursing courses to further refine and apply the concepts of nursing practice in the care of the reproducing and developing family. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings in maternal/newborn and pediatric environments. Students must register for the lecture and clinical corequisites and successfully complete all components.

## Pre-reqs:

And NSG141C

And NSG141L

NSG221 And NSG221C Can be Taken Concurrently

Can be Taken Concurrently

## NSG241 Concept Patient Stable/Unsta

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course further refines the concepts of nursing practice with application to the care of adult patients with stable and unstable acute conditions. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lab and clinical co-requisites and successfully complete all components.

## **Pre-reqs:**

And BIO122

And NSG141

And NSG141C

And NSG141L

And NSG241C Can be Taken Concurrently

NSG241L Can be Taken Concurrently

## NSG241C Concept Patient Stable/Un Clin

Credit Hours: 1.5 Contact Hours: 4.5 Lecture Hours: 0 Lab Hours: 4.5 Other Hours: 0

This course further refines the concepts of nursing practice with application to the care of adult patients with stable and unstable acute conditions. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lab and lecture co-requisites and successfully complete all components.

## Pre-regs:

And BIO122



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## **Health and Human Services**

**Nursing** 

#### NSG241C Concept Patient Stable/Un Clin

Credit Hours: 1.5 Contact Hours: 4.5 Lecture Hours: 0 Lab Hours: 4.5 Other Hours: 0

This course further refines the concepts of nursing practice with application to the care of adult patients with stable and unstable acute conditions. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lab and lecture co-requisites and successfully complete all components.

## Pre-reqs:

And NSG141

And NSG141C

And NSG141L

NSG241

1150211

And NSG241L

Can be Taken Concurrently

Can be Taken Concurrently

## NSG241L Concept Patient Stable/Un Lab

Credit Hours: 0.5 Contact Hours: 1.5 Lecture Hours: 0 Lab Hours: 1.5 Other Hours: 0

This course further refines the concepts of nursing practice with application to the care of adult patients with stable and unstable acute conditions. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lecture and clinical co-requisites and successfully complete all components.

## Pre-reqs:

And BIO122

And NSG141

And NSG141C

And NSG141L

NSG241 Can be Taken Concurrently

And NSG241C Can be Taken Concurrently

## NSG261 Concept Nurs Prac Lifespan

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

This course builds on all previous nursing courses to further refine and apply the concepts of nursing practice to the care of patients with complex conditions. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lab and clinical co-requisites and successfully complete all components.



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## **Health and Human Services**

**Nursing** 

## NSG261 Concept Nurs Prac Lifespan

Credit Hours: 5 Contact Hours: 5 Lecture Hours: 5 Lab Hours: 0 Other Hours: 0

This course builds on all previous nursing courses to further refine and apply the concepts of nursing practice to the care of patients with complex conditions. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lab and clinical co-requisites and successfully complete all components.

## Pre-reqs:

And BIO221

And NSG221

And NSG221C

And NSG221L

And NSG241

And NSG241C

And NSG241L

And NSG261C Can be Taken Concurrently

NSG261L Can be Taken Concurrently

And PSY123

## NSG261C Concpt Nurs Prac Lifespan clin

Credit Hours: 3 Contact Hours: 9 Lecture Hours: 0 Lab Hours: 9 Other Hours: 0

This course builds on all previous nursing courses to further refine and apply the concepts of nursing practice to the care of patients with complex conditions. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lab and lecture co-requisites and successfully complete all components.

## Pre-regs:

And BIO221

And NSG221

And NSG221C

And NSG221L

And NSG241

And NSG241C

And NSG241L

NSG261 Can be Taken Concurrently

And NSG261L Can be Taken Concurrently

And PSY123



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## **Health and Human Services**

**Nursing** 

#### NSG261L Concept Nurs Prac Lifespan lab

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This course builds on all previous nursing courses to further refine and apply the concepts of nursing practice to the care of patients with complex conditions. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings. Students must register for the lecture and clinical co-requisites and successfully complete all components.

## Pre-reqs:

And BIO221

And NSG221

And NSG221C

And NSG221L

And NSG241

And NSG241C

And NSG241L

NSG261 Can be Taken Concurrently

And NSG261C Can be Taken Concurrently

And PSY123

#### 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-regs:

#### STN100 State Tested Nurse Aide

Credit Hours: 3 Contact Hours: 6 Lecture Hours: 1.5 Lab Hours: 4.5 Other Hours: 0

This course is designed to prepare the student for STNA Testing. There are two parts to the nurse aide competency test a multiple-choice written/oral test and a skills test. The completer of this course should understand the standards related to nurse aide knowledge and skills and can competently and safely perform the job of an entry-level nurse aide. Application of knowledge occurs in the laboratory and clinical setting.



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## **Health and Human Services**

**Nursing** 

#### STN100 State Tested Nurse Aide

Credit Hours: 3 Contact Hours: 6 Lecture Hours: 1.5 Lab Hours: 4.5 Other Hours: 0

This course is designed to prepare the student for STNA Testing. There are two parts to the nurse aide competency test a multiple-choice written/oral test and a skills test. The completer of this course should understand the standards related to nurse aide knowledge and skills and can competently and safely perform the job of an entry-level nurse aide. Application of knowledge occurs in the laboratory and clinical setting.

Pre-regs:

## **Occupational Therapy**

## HTD209 HLTH INDEP STUDY-OCC THERAPY

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This independent study provides remediation of occupational therapy skills used in the treatment of patients with deficits in functional performance with everyday tasks and occupations. Students enrolled in the independent study will review and practice previously completed competencies. Students will be required to demonstrate competency in assigned skills and documentation to assure adequate knowledge and proficiency before readmission into the program and/or fieldwork setting.

Pre-regs:

## HTD210 HLTH INDEP STUDY-OCC THERAPY

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

This independent study provides remediation of occupational therapy skills used in the treatment of patients with deficits in functional performance with everyday tasks and occupations. Students enrolled in the independent study will review and practice previously completed competencies. Students will be required to demonstrate competency in assigned skills and documentation to assure adequate knowledge and proficiency before readmission into the program and/or fieldwork setting.

Pre-reqs:



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## **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-regs:

#### 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:** 

# 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:

**OTA121** 

And OTA122

And PSY121

And PSY221



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## **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** 

And 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

And BIO123

OTA123

And OTA124

And OTA223 Can be Taken Concurrently

And PTA226 Can be Taken Concurrently

## 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

BIO123

And OTA123



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## **Health and Human Services**

**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-regs:

And OTA124

And OTA223 Can be Taken Concurrently
And PTA226 Can be Taken Concurrently

#### 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** 

## 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-regs:

And BIO124

Can be Taken Concurrently

OTA221

And OTA222



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## **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-regs:

And OTA221

OTA222

## 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

And OTA225

# 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

And OTA225



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## **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

# **Ophthalmology**

## OPH100 Intro to Ophthalmology Prof

Credit Hours: 3 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course introduces the roles and responsibilities of ophthalmic medical professionals, with major emphasis on patient care and office administrative skills. A review of microbiology and medical terminology as it relates to the field is provided. Students are also introduced to medical ethics, safety, and community health eye care.

## Pre-regs:

# OPH101 Ophthalmic Procedures I

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course covers the basic clinical skills of ophthalmology including: vital signs, visual acuity, external eye examination, visual fields, papillary assessment, lensometry, keratometry, tonometry, and other supplementary tests. Students will be introduced to the use and maintenance of clinical equipment and supplies.

Pre-regs:



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## **Health and Human Services**

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## OPH102 Ocular Anatomy & Physiology

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course focuses on the normal anatomy of the eye and visual pathway, as well as the physiology of ocular movements and vision.

Pre-regs:

# OPH103 Ophthalmic Procedures II

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course focuses on clinical optics and basic ophthalmic procedures such as biometry, low vision, refractometry, retinoscopy, basic ophthalmic imaging, contact lenses, spectacle skills, and surgical assisting.

## Pre-regs:

OPH102

# **OPH104** Ophthalmology Practicum I

Credit Hours: 3 Contact Hours: 21 Lecture Hours: 0 Lab Hours: 21 Other Hours: 0

The student is placed in a medical facility for 315 hours of practical application of all basic ophthalmology skills learned in the classroom/lab and for additional instruction in the actual operation and management of the health care facility. This is a non-paid practicum. The student works under the close observation and supervision of the physician and office staff. Students will also participate in a seminar sharing clinical experiences.

Pre-reqs:

OPH103



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## **Health and Human Services**

**Ophthalmology** 

OPH1	05	Ocular	Diseases
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Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course focuses on the common ocular disorders and reviews systemic diseases relating to ocular conditions.

Pre-regs:

# **OPH106** Ocular Pharmacology

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course focuses on ocular pharmacology including delivery, indications, contraindications, potential side effects, drug interactions, and patient education of common agents used in the diagnosis and treatment of eye disorders.

Pre-regs:

# **OPH107** Ophthalmology Practicum II

Credit Hours: 2 Contact Hours: 14 Lecture Hours: 0 Lab Hours: 14 Other Hours: 0

The student is placed in a medical facility for 210 hours of practical application of basic and intermediate level ophthalmology skills learned in the classroom/lab. This is a non-paid practicum. The student works under the close observation and supervision of the physician and office staff. Students will also participate in a seminar sharing clinical experiences.

Pre-regs:

**OPH104** 



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## **Health and Human Services**

**Ophthalmology** 

## OPH200 Ophthalmic Procedures III

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course focuses on intermediate and basic advanced ophthalmic skills including pupillary assessment, lensometry, keratometry, retinoscopy, tonometry, visual assessment, visual fields, ocular motility, spectacle skills, electrophysiology and advanced supplementary tests.

## Pre-reqs:

**OPH103** 

# OPH201 Ophthalmology Practicum III

Credit Hours: 2 Contact Hours: 14 Lecture Hours: 0 Lab Hours: 14 Other Hours: 0

The student is placed in a medical facility for 210 hours of practical application of intermediate and basic advanced level ophthalmology skills learned in the classroom/lab. This is a non-paid practicum. The student works under the close observation and supervision of the physician and office staff. Students will also participate in a seminar sharing clinical experiences.

## Pre-regs:

**OPH107** 

# OPH202 Ophthalmic Procedures IV

Credit Hours: 4 Contact Hours: 6 Lecture Hours: 2 Lab Hours: 4 Other Hours: 0

This course focuses on intermediate and basic advanced skills in ophthalmologic imaging, surgical assisting and special diagnostic testing.

## Pre-regs:

OPH200



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## **Health and Human Services**

**Ophthalmology** 

## OPH203 Ophthalmology Practicum IV

Credit Hours: 3 Contact Hours: 21 Lecture Hours: 0 Lab Hours: 21 Other Hours: 0

The student is placed in a medical facility for 315 hours of practical application of intermediate and basic advanced level ophthalmology skills learned in the classroom/lab. This is a non-paid practicum. The student works under the close observation and supervision of the physician and office staff. Students will also participate in a seminar sharing clinical experiences.

## Pre-regs:

OPH201

## **Physical Therapy**

## **EXS110** Anatomy of Exercise

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

Introduction to the structure and function of the skeletal, neuromuscular, and cardiopulmonary/vascular systems as they apply to exercise and rehabilitation. Students must register for the lab co-requisite and successfully complete both lecture and lab components.

## Pre-regs:

BIO122 Can be Taken Concurrently
Or BIO123 Can be Taken Concurrently
And EXS110L Can be Taken Concurrently

## **EXS110L** Anatomy of Exercise Lab

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

Laboratory applications related to the structure and function of the skeletal, neuromuscular, and cardiopulmonary/vascular systems as they apply to exercise and rehabilitation. Students must register for the lecture co-requisite and successfully complete both lecture and lab components.

Pre-regs:

EXS110 Can be Taken Concurrently



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## **Health and Human Services**

**Physical Therapy** 

# **EXS120** Exercise Applications

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Reinforces and expands principles, applications, and theories of exercise science and its role in prevention, wellness and/or rehabilitation. Includes instruction in and rationale for selected testing procedures and exercise applications. Students must register for the lab co-requisite and successfully complete both lecture and lab components.

Pre-reqs:

**EXS110** 

And EXS120L

Can be Taken Concurrently

## **EXS120L Exercise Applications Lab**

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

Laboratory procedures related to principles, applications, and theories of exercise science and its role in prevention, wellness and/or rehabilitation. Includes instruction in and rationale for selected testing procedures and exercise applications. Students must register for the lecture co-requisite and successfully complete both lecture and lab components.

**Pre-reqs:** 

**EXS120** 

Can be Taken Concurrently

## PTA110 Therapy Sciences

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course presents to the students a basic study of common scientific concepts related to the provision of physical therapy. Content includes the study of different tissues and their response to stress, injury, inflammation, their resultant healing and recovery, and the related clinical stages of rehabilitation. Basic neurological structures relating to motor control, sensory feedback, and pain are also presented.

**Pre-reqs:** 

PTA118



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## **Health and Human Services**

**Physical Therapy** 

#### PTA118 Principles of Patient Care

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Introduction to the field of health care, basic standards of health care management, medical terminology and abbreviations, and patient care skills. Instruction includes data collection and interventions for individuals having selected conditions, vital signs, infection control procedures, body mechanics, patient positioning and draping, transfer techniques, gait training using selected assistive devices, and other selected patient care topics. Physical Therapist Assistant students must register for the lab co-requisite and successfully complete both lecture and lab components.

Pre-reqs:

And PTA110

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Can be Taken Concurrently

PTA118L

Can be Taken Concurrently

## PTA118L Principles of Patient Care Lab

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Laboratory applications related to the field of health care, basic standards of health care management, medical terminology and abbreviations, and basic patient care skills. The student will practice data collection and interventions for individuals having selected conditions and treatments, vital signs, infection control procedures, body mechanics, patient positioning and draping, transfer techniques, gait training using selected assistive devices, and other selected patient care topics. Physical Therapist Assistant students must register for the lecture co-requisite and successfully complete both lecture and lab components.

Pre-reqs:

#### PTA119 Professional Values & Ethics

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

An overview of the history of physical therapy and its professional association. Topics include: foundational values and ethics of the profession, roles and responsibilities of the PT and the PTA within the patient care model, program expectations regarding student professionalism in the classroom and during clinical performance, and issues relating to patient confidentiality, diversity, and respect. An introduction to clinical documentation will be presented.

**Pre-reqs:** 



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## **Health and Human Services**

**Physical Therapy** 

# PTA120 Introduction to Orthopedics

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

Review structure and function of articulations. Introduce biomechanical principles related to human motion and locomotion, including articulations, gait analysis, regional, and neuromuscular relationships. Students must register for the lab co-requisite and successfully complete both lecture and lab components.

Pre-reqs:

**PHY101** 

And PTA120L Can be Taken Concurrently
And PTA128 Can be Taken Concurrently

## PTA120L Intro to Orthopedics Lab

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

Laboratory applications related to structure and function of articulations. Introduce biomechanical principles related to human motion and locomotion, including articulations, gait analysis, regional, and neuromuscular relationships. Students must register for the lecture co-requisite and successfully complete both lecture and lab components.

Pre-reqs:

PTA120 Can be Taken Concurrently

## 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:



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## **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 prior coursework to clinical situations.

## Pre-regs:

PTA119

And PTA138

Can be Taken Concurrently

# PTA128 PTA Procedures I Clinic Interv

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 2 Lab Hours: 6 Other Hours: 0

This course will present a comprehensive study of principles of biophysical agents used in physical therapy. Content includes the rationale, effects, adverse effects, contraindications, precautions, application, and documentation of such agents. Laboratory activities, written assignments, and lab testing are required components of this course. Students may perform selected therapeutic interventions with patients or other students under direct PT/PTA supervision as part of the laboratory components of this course. A study of selected impairments, functional limitations, and interventions associated with orthopedic conditions, neurological conditions, integumentary conditions, and pulmonary conditions are also included.

# Pre-reqs:

PTA110

And PTA118

And PTA120

Can be Taken Concurrently

### PTA136 Neuro Found for Rehab

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Introduction to basic structure and function of central, peripheral and autonomic nervous systems as they relate to rehabilitation, normal neurologic developmental sequence, and milestones. Presents selected impairments, functional limitations, disabilities, data collection and therapeutic interventions related to neurologic pathologies.

## Pre-reqs:

BIO122

Or BIO123



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## **Health and Human Services**

**Physical Therapy** 

#### PTA138 Data Collection

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Introduction to data collection and documentation skills associated with patient care. Topics include, but are not limited to: medical history taking for common medical concerns, arousal, mentation, and cognition, anthropometric measurements, vital signs, thoracoabdominal movement and breathing patterns, integumentary integrity and sensation, goniometry, joint play, muscle testing and tone, posture, alignment and balance, gait, and environmental analysis. Students must register for the lab co-requisite and successfully complete both lecture and lab components.

## Pre-reqs:

And PTA125 Can be Taken Concurrently

PTA128

And PTA138L Can be Taken Concurrently

## PTA138L Data Collection Lab

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

Laboratory applications related to data collection and documentation skills. Topics include, but are not limited to: medical history taking for common medical concerns, arousal, mentation, and cognition, anthropometric measurements, vital signs, thoracoabdominal movement and breathing patterns, integumentary integrity and sensation, goniometry, joint play, muscle testing and tone, posture, alignment and balance, gait, and environmental analysis. Students must register for the lecture corequisite and successfully complete both lecture and lab components.

## Pre-regs:

PTA138 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

PTA124

And PTA125

And PTA228 Can be Taken Concurrently

And PTA229 Can be Taken Concurrently



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## **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

And PTA225

## 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:

BIO124

And EXS120

And PTA120

### 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:

BIO124

And PTA136

And PTA248



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## **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

BIO123

## PTA228 SEMINAR I

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Presentation of topics related to clinical practice to include ethics and professional development.

# Pre-reqs:

PTA125

And PTA247

Can be Taken Concurrently

## 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:

**PTA228** 

And PTA257

And PTA267

Can be Taken Concurrently



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## **Health and Human Services**

**Physical Therapy** 

## PTA247 Clinical Experience I

Credit Hours: 1 Contact Hours: 7 Lecture Hours: 0 Lab Hours: 7 Other Hours: 0

Clinical experience in various physical therapy departments under direct supervision.

## Pre-regs:

**PTA125** 

And PTA228

Can be Taken Concurrently

## PTA248 Multisystems

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

Introduction to impairments, functional limitations, disabilities, data collection and therapeutic interventions related to selected integumentary, cardiovascular, lymphatic, endocrine, gastrointestinal, and urological conditions. Management of complex medical conditions affecting patients in physical therapy will be presented. Students must register for the lab corequisite and successfully complete both lecture and lab components.

# Pre-reqs:

PTA138

And PTA225 Can be Taken Concurrently
And PTA248L Can be Taken Concurrently

## PTA248L Multisystems Lab

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

Laboratory applications related to the study of impairments, functional limitations, disabilities, data collection and therapeutic interventions related to selected integumentary, cardiovascular, lymphatic, endocrine, gastrointestinal, and urological conditions. Management of complex medical conditions affecting patients in physical therapy will be presented. Students must register for the lecture co-requisite and successfully complete both lecture and lab components.

## Pre-reqs:

**PTA248** 



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## **Health and Human Services**

**Physical Therapy** 

# PTA257 Clinical Experience II

Credit Hours: 1 Contact Hours: 7 Lecture Hours: 0 Lab Hours: 7 Other Hours: 0

Clinical experience in various physical therapy departments under direct supervision.

Pre-regs:

And PTA230

Can be Taken Concurrently

PTA247

## PTA267 Clinical Experience III

Credit Hours: 2 Contact Hours: 14 Lecture Hours: 0 Lab Hours: 14 Other Hours: 0

Clinical experience in various physical therapy departments under direct supervision.

Pre-reqs:

## **Practical Nursing**

# PNC100 Nursing 1

Credit Hours: 4 Contact Hours: 5 Lecture Hours: 3 Lab Hours: 1 Other Hours: 1

This course focuses on the beginning knowledge and skills that form the foundation of basic nursing care. Some of the topics included are hygiene, vital signs, medical asepsis, health and wellness, communications, the basic principles of nutrition as it relates to wellness and the promotion of health, developmental changes as they occur from young adulthood to senescence, and gender identity/sexual orientation. The student applies classroom theory of basic nursing skills to both the practice and clinical laboratory settings. This course also presents ethical, legal, and social issues that will affect the practical nurse during his/her nursing career. A study of nursing history and current health care trends is presented to give a sense of heritage and future. CTAG CTLPRN001 approved, effective spring 2022 ITAG approved ITLPRN001, effective summer 2022

## Pre-regs:

BIO101 Can be Taken Concurrently
And PNC101 Can be Taken Concurrently



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## **Health and Human Services**

## **Practical Nursing**

## PNC101 Pharmacology 1

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction into pharmacology. Topics include the history of drugs, the legal aspects of medication administration, pharmacodynamics, math calculations, intravenous drip rates, and the basic principles for preparing and administering medications. CTAG CTLPRN001 approved, effective spring 2022 ITAG approved ITLPRN001, effective summer 2022

## Pre-reqs:

And BIO101 Can be Taken Concurrently PNC100 Can be Taken Concurrently

## PNC120 Nursing 2

Credit Hours: 5 Contact Hours: 7 Lecture Hours: 3 Lab Hours: 2 Other Hours: 2

This course builds on basic nursing knowledge. Topics such as immunity; catheterizations and irrigations; death and dying; and the care of the HIV, surgical, cancer, and mental health patient are discussed using the nursing process to identify appropriate nursing interventions. In addition, this course prepares the student to be certified in intra-venous (IV) therapy covering topics such as understanding the rules and laws governing infusion practices for LPN's in Ohio, initiating and maintaining an IV infusion, complication of IV infusions, and considerations for the geriatric population. Skills necessary to implement identified nursing interventions will be taught in the practice laboratory. Clinical experience will be offered in adult acute care, long-term care, and rehabilitation facilities. CTAG CTLPRN001 approved, effective spring 2022 ITAG approved ITLPRN001, effective summer 2022

### Pre-regs:

And BIO101 Can be Taken Concurrently

PNC100

And PNC101

And PNC121 Can be Taken Concurrently

## PNC121 Pharmacology 2

Credit Hours: 3 Contact Hours: 3.5 Lecture Hours: 2.5 Lab Hours: 1 Other Hours: 0

This course focuses on the role of the practical nurse in the preparation and administration of medications. The classifications of medications will be taught focusing on the pathophysiology, nursing implications, and patient/family teaching. Issues related to self-medication will also be discussed. During the practice laboratory, the student will have the opportunity to prepare and administer medications using the theory base that has been presented.

#### **Pre-regs:**

And BIO101 Can be Taken Concurrently

PNC100

And PNC101

And PNC120 Can be Taken Concurrently



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## **Health and Human Services**

## **Practical Nursing**

## PNC130 Nursing 3

Credit Hours: 9 Contact Hours: 12 Lecture Hours: 6 Lab Hours: 2 Other Hours: 4

This course focuses on nursing care of patients with disorders of the cardiovascular, respiratory, neurologic, endocrine, gastrointestinal, and the genitourinary systems. Each system is studied through the collection of data using the nursing process to observe patient behavior, plan patient care, identify nursing interventions, and evaluate patient outcomes.

## Pre-regs:

**PNC120** 

And PNC121

## PNC140 Nursing 4

Credit Hours: 8 Contact Hours: 12 Lecture Hours: 4 Lab Hours: 2 Other Hours: 6

This course focuses on the nursing care of patients with disorders of the musculoskeletal, sensory, and reproductive systems as well as the nursing care of individuals during pregnancy, labor, delivery, and postpartum. Nursing care of newborn and pediatric patients with a focus on growth and development from infancy through adolescence is discussed. Common pediatric conditions and the impact of change/crisis on the family's ability to adapt are included in the clinical component. This course also prepares the student for the NCLEX State Board of Nursing test.

# Pre-reqs:

**PNC130** 

## Respiratory Therapy/MIST

## HTD233 HLTH INDEP STUDY-RESPIRATORY

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This independent study provides remediation of respiratory care procedures used in the treatment of patients with cardiopulmonary disease. Students enrolled in the independent study will review and practice previously completed competencies. Students will be required to demonstrate competency in assigned skills to assure adequate knowledge and proficiency before readmission into the program and/or clinical setting.

Pre-regs:



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## **Health and Human Services**

Respiratory Therapy/MIST

#### HTD234 HLTH INDEP STUDY-RESPIRATORY

Credit Hours: 2 Contact Hours: 4 Lecture Hours: 0 Lab Hours: 4 Other Hours: 0

This independent study provides remediation of respiratory care procedures used in the treatment of patients with cardiopulmonary disease. Students enrolled in the independent study will review and practice previously completed competencies. Students will be required to demonstrate competency in assigned skills to assure adequate knowledge and proficiency before readmission into the program and/or clinical setting.

Pre-regs:

#### HTD235 HLTH INDEP STUDY-RESPIRATORY

Credit Hours: 3 Contact Hours: 6 Lecture Hours: 0 Lab Hours: 6 Other Hours: 0

This independent study provides remediation of respiratory care procedures used in the treatment of patients with cardiopulmonary disease. Students enrolled in the independent study will review and practice previously completed competencies. Students will be required to demonstrate competency in assigned skills to assure adequate knowledge and proficiency before readmission into the program and/or clinical setting.

**Pre-reqs:** 

# HTD236 HLTH INDEP STUDY-RESPIRATORY

Credit Hours: 4 Contact Hours: 8 Lecture Hours: 0 Lab Hours: 8 Other Hours: 0

This independent study provides remediation of respiratory care procedures used in the treatment of patients with cardiopulmonary disease. Students enrolled in the independent study will review and practice previously completed competencies. Students will be required to demonstrate competency in assigned skills to assure adequate knowledge and proficiency before readmission into the program and/or clinical setting.

Pre-regs:



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## **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-regs:

**MIS124** 

#### 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 service 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-regs:

BIO101

# 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-regs:

And BIO125 MIS124 Can be Taken Concurrently
Can be Taken Concurrently



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## **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-regs:

**MIS124** 

## 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

And MIS126

Can be Taken Concurrently

#### 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

And MIS126



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## **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-regs:

**MIS127** 

And MIS222

Can be Taken Concurrently

## RCT121 Intro to Respiratory Care

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An introduction to the field of respiratory care: the job functions of the respiratory therapy profession, orientation to charting techniques, patient positioning, vital sign and physical assessment, aerosolized delivery of medication, incentive spirometry, basic life support techniques, cleaning and sterilization, isolation techniques, and other procedures required for entry into the hospital setting. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lab co-requisite and successfully complete both components.

# Pre-reqs:

BIO122

Or BIO123

And RCT121L

Can be Taken Concurrently

## **RCT121L** Intro to Respiratory Care Lab

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

An introduction to the field of respiratory care: the job functions of the respiratory therapy profession, orientation to charting techniques, patient positioning, vital sign and physical assessment, aerosolized delivery of medication, incentive spirometry, basic life support techniques, cleaning and sterilization, isolation techniques, and other procedures required for entry into the hospital setting. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lecture co-requisite and successfully complete both components.

Pre-reqs:



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## **Health and Human Services**

Respiratory Therapy/MIST

## RCT122 MED GAS ADMINISTRATION

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An introduction to the basics of oxygen administration, aerosol and humidification therapy. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lab co-requisite and successfully complete both components.

Pre-regs:

#### **RCT122L Medical Gas Administration Lab**

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

An introduction to the basics of oxygen administration, aerosol and humidification therapy. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lecture co-requisite and successfully complete both components.

**Pre-reqs:** 

# RCT123 AIRWAY MANAGEMENT PROCED

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An introduction to the therapeutic and diagnostic modalities used in the treatment and assessment of pulmonary diseases to include hyperinflation techniques, bronchial hygiene, artificial airways, airway clearance techniques including suctioning and tracheostomy care, and arterial punctures. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lab co-requisite and successfully complete both components.

Pre-regs:

RCT124



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## **Health and Human Services**

Respiratory Therapy/MIST

## RCT123L Airway Mgmt Procedures Lab

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 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 hyperinflation techniques, bronchial hygiene, artificial airways, airway clearance techniques including suctioning and tracheostomy care, and arterial punctures. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lecture co-requisite and successfully complete both components.

Pre-regs:

# RCT124 Resp Care Pharmacology

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:** 

## RCT125 Practicum I Seminar

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The seminar component of Practicum I consists of an orientation to diagnostic testing that will be encountered in the clinical setting when assessing patients. Students will receive instruction and participate in discussion of clinical application of the following topics: chest x-ray interpretation; special radiologic tests; laboratory testing; arterial blood gas interpretation; and quality control of arterial blood gas sampling.

Pre-regs:



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## **Health and Human Services**

**Respiratory Therapy/MIST** 

## RCT125C Practicum I Clinical

Credit Hours: 2 Contact Hours: 14 Lecture Hours: 0 Lab Hours: 14 Other Hours: 0

Clinical experiences provided include an introduction to basic patient care skills such as: medical assessis, vital sign monitoring, physical assessment, charting, patient chart review, isolation, and resuscitation. Also included are experiences in medical gas administration, aerosol therapy, and hyperinflation and bronchial hygiene techniques.

## Pre-regs:

**RCT124** 

## RCT126 CRITICAL CARE

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

An introduction of the principles related to the care of the critically ill patient with an emphasis on mechanical ventilation. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lab co-requisite and successfully complete both components.

#### **Pre-reqs:**

RCT123

# **RCT126L Critical Care Laboratory**

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

An introduction of the principles related to the care of the critically ill patient with an emphasis on mechanical ventilation. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lecture corequisite and successfully complete both components.

Pre-regs:



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## **Health and Human Services**

## Respiratory Therapy/MIST

## RCT128 Practicum II Seminar

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The seminar component of Practicum II consists of an orientation to conducting, interpreting, and quality control of pulmonary function testing. Students will perform pulmonary function testing and participate in discussion of clinical application and interpretation of data.

Pre-regs:

## **RCT128C** Practicum II Clinical

Credit Hours: 1 Contact Hours: 7 Lecture Hours: 0 Lab Hours: 7 Other Hours: 0

Clinical experiences are provided in the area of airway management, aerosol therapy, hyperinflation and bronchial hygiene techniques, arterial punctures, and tracheobronchial suctioning. Experiences are also provided in specialty care areas of respiratory care.

#### **Pre-reqs:**

**RCT123** 

And RCT125C

## 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** 



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## **Health and Human Services**

**Respiratory Therapy/MIST** 

## RCT220 CARDIOPULMONARY A & P

Credit Hours: 4 Contact Hours: 4 Lecture Hours: 4 Lab Hours: 0 Other Hours: 0

This course introduces students to the anatomy and physiology of the respiratory and cardiovascular systems. It also includes the application of cardiopulmonary physiology related to the diagnosis, monitoring, and care of the critically ill respiratory patient. Application topics include advanced mechanical ventilator management, capnography, patient positioning, metabolic measurements, advanced arterial blood gas interpretation, and cardiopulmonary calculations.

## Pre-regs:

And BIO122

Or BIO123

**RCT126** 

## 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

## RCT224 Practicum III Seminar

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The seminar component of Practicum III consists of an introduction to cardiac testing and monitoring seen in the clinical setting. Students will learn to interpret and perform EKG's.

Pre-regs:



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## **Health and Human Services**

## **Respiratory Therapy/MIST**

#### RCT224C Practicum III Clinical

Credit Hours: 2 Contact Hours: 14 Lecture Hours: 0 Lab Hours: 14 Other Hours: 0

Clinical experiences provided include an exposure to invasive and non-invasive ventilatory management and other procedures related to the care of the critically ill patient. Experiences are also provided in specialty care areas of respiratory care.

## Pre-regs:

**RCT126** 

And RCT128C

## RCT225 Practicum IV Seminar

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

This course prepares students for the work field. Clinical experiences provided include management of the critically ill adult, pediatric, and newborn patient. Students also participate in a clinical simulation capstone experience and advanced cardiac life support certification courses. In the computer laboratory component, students will participate in computer based practice sessions in preparation for the NBRC credentialing examinations required to become a registered respiratory therapist. The seminar component consists of a guest speaker series covering specialty topics in healthcare. Students must register for the lab and clinical co-requisites and successfully complete all components.

## Pre-regs:

#### **RCT225C** Practicum IV Clinical

Credit Hours: 3 Contact Hours: 21 Lecture Hours: 0 Lab Hours: 21 Other Hours: 0

This course prepares students for the respiratory care work field. Clinical experiences provided include management of the critically ill adult, pediatric, and newborn patient. Students also participate in a clinical simulation capstone experience and advanced cardiac life support certification courses. In the computer laboratory component, students will participate in computer based practice sessions in preparation for the NBRC credentialing examinations required to become a registered respiratory therapist. The seminar component consists of a guest speaker series covering specialty topics in healthcare. Students must register for the lab and seminar co-requisites and successfully complete all components.

## **Pre-reqs:**

RCT224C

And RCT226

And RCT227



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## **Health and Human Services**

## **Respiratory Therapy/MIST**

## RCT225L Practicum IV Laboratory

Credit Hours: 1 Contact Hours: 3 Lecture Hours: 0 Lab Hours: 3 Other Hours: 0

This course prepares students for the respiratory care work field. Clinical experiences provided include management of the critically ill adult, pediatric, and newborn patient. Students also participate in a clinical simulation capstone experience and advanced cardiac life support certification courses. In the computer laboratory component, students will participate in computer based practice sessions in preparation for the NBRC credentialing examinations required to become a registered respiratory therapist. The seminar component consists of a guest speaker series covering specialty topics in healthcare. Students must register for the clinical and seminar co-requisites and successfully complete all components.

Pre-regs:

## 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** 

# RCT227 Neonatal/Peds Respiratory Care

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 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. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lab co-requisite and successfully complete both components.

Pre-reqs:

**RCT126** 



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## **Health and Human Services**

## **Respiratory Therapy/MIST**

#### RCT227L Neonatal/Peds Resp Care Lab

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 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. Application of knowledge and skills occurs in the respiratory care laboratory. Students must register for the lecture co-requisite and successfully complete both components.

## Pre-regs:

# Surgical

# **SUA100** Intro to Surgical Assisting

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an introduction to the surgical assisting profession. The course will provide an overview of ethical and moral responsibilities, all hazards preparation, surgical microbiology, and the role of the Surgical Assistant related to anesthesia as well as postoperative management.

# Pre-reqs:

SUA102 Can be Taken Concurrently
And SUA102L Can be Taken Concurrently

# SUA102 Princ of Surgical Assist

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores the areas of wound healing, perioperative management and perioperative skills. Students will learn skills related to evaluation and assessment of the surgical patient prior to and during surgery. Techniques of knot tying, wound dressings, positioning, skin preparation, and operative site exposure will be discussed and practiced. Patient management of acute trauma will also be addressed. Application of knowledge and skills occurs in the surgical assisting laboratory. Students must register for the laboratory co-requisite and successfully complete both components.

## Pre-regs:

SUA100 Can be Taken Concurrently
And SUA102L Can be Taken Concurrently



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## **Health and Human Services**

**Surgical** 

## **SUA102L** Princ of Surgical Assist Lab

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course explores the areas of wound healing, perioperative management and perioperative skills. Students will learn skills related to evaluation and assessment of the surgical patient prior to and during surgery. Techniques of knot tying, wound dressings, positioning, skin preparation, and operative site exposure will be discussed and practiced. Patient management of acute trauma will also be addressed. Application of knowledge and skills occurs in the surgical assisting laboratory. Students must register for the lecture co-requisite and successfully complete both components.

Pre-reqs:

SUA102 Can be Taken Concurrently

## **SUA104** Adv Surg Anat & Phys

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on regional anatomy with surgical anatomy being the critical component. This course also explores an in-depth advanced approach to anatomical knowledge which is applied to surgical diagnosis and procedures.

**Pre-reqs:** 

## **SUA106** Surgical Assisting Procedures

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course explores surgical specialties including general, obstetric gynecology, genitourinary, ophthalmic, otorhinolaryngologic, orthopedic, plastic/reconstructive, neurosurgery, cardiothoracic, and peripheral vascular. An indepth focus of all surgeries and the assistants' role will be covered. Application of knowledge and skills occurs in the surgical assisting laboratory. Students must register for the laboratory co-requisite and successfully complete both components.

Pre-reqs:

SUA102

And SUA102L

And SUA106L



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## **Health and Human Services**

**Surgical** 

#### **SUA106L Surgical Assist Procedures Lab**

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course explores surgical specialties including general, obstetric gynecology, genitourinary, ophthalmic, otorhinolaryngologic, orthopedic, plastic/reconstructive, neuro, cardiothoracic, and peripheral vascular. An in-depth focus of all surgeries and the assistants' role will be covered. Application of knowledge and skills occurs in the surgical assisting laboratory. Students must register for the lecture co-requisite and successfully complete both components.

Pre-reqs:

**SUA102** 

And SUA102L

And SUA106

Can be Taken Concurrently

## **SUA108** Surg Ast Direct Practice I Sem

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The seminar component of Surgical Assisting Directed Practice I consists of sharing of clinical experiences. Students are required to keep a log of the surgical cases completed. Discussion forums and case studies are used to share information, discuss problems, and answer questions regarding the assigned surgical cases. Students must register for the clinical corequisite and successfully complete both components.

**Pre-reqs:** 

SUA108C

Can be Taken Concurrently

## **SUA108C** Surg Ast Directed Practice I

Credit Hours: 3 Contact Hours: 15 Lecture Hours: 0 Lab Hours: 15 Other Hours: 0

This course provides students with surgical clinical experience in the surgical assisting role. Specific surgical cases in general and specialty areas are assigned. The main surgery focus is on general, OB/GYN, genitourinary, otorhinolarynogology, and orthopedics. Students are required to complete an accumulative total of 140 cases during Surgical Assisting Directed Practice I and II. Students must register for the seminar co-requisite and successfully complete both components.

Pre-reqs:

SUA102

And SUA102L

And SUA108



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## **Health and Human Services**

**Surgical** 

#### **SUA110** Surg Asst Clin Prac II Seminar

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The seminar component of Surgical Assisting Clinical Practicum II consists of sharing of clinical experiences. Students are required to keep a log of the surgical cases completed. Discussion forums and case studies are used to share information, discuss problems, and answer questions regarding the assigned surgical cases. Students must register for the clinical corequisite and successfully complete both components.

Pre-reqs:

SUA110C Can be Taken Concurrently

# **SUA110C** Surg Asst Clin Prac II

Credit Hours: 2 Contact Hours: 14 Lecture Hours: 0 Lab Hours: 14 Other Hours: 0

This course provides students with surgical clinical experience in the surgical assisting role. Specific surgical cases in general and specialty areas are assigned. The main surgery focus is on oral and maxillofacial, plastic and reconstructive, ophthalmic, cardiothoracic, peripheral vascular, and neurosurgery procedures. Students are required to complete an accumulative total of 140 cases during Surgical Assisting Directed Practice I and Clinical Practicum II. Students must register for the seminar co-requisite and successfully complete both components.

#### **Pre-reqs:**

SUA108C

And SUA110 Can be Taken Concurrently
And SUA112 Can be Taken Concurrently

## **SUA112** Surg Asst Spec Capstone

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is an in-depth analysis of the students' clinical experiences. Students will complete and present case studies based on their surgical cases. Guest speakers will provide lectures covering general and other surgical specialty areas. In addition, students will participate in credentialing exam preparation activities.

Pre-regs:

SUA110C Can be Taken Concurrently



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## **Health and Human Services**

**Surgical** 

#### **SUA114** Surg Asst Adv Pathophy

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course provides an overview of surgical site infections, causes, and risk factors. The topics of antimicrobial use, wound classifications, anatomy of skin, and wound healing will be covered. This course also explores electrolyte/fluid balance and hematologic principles of surgery.

## Pre-reqs:

**SUA104** 

# SUR102 Principles of Surgery I

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course reviews the role of the surgical technologist pre-operatively. Proper patient identification, methods of patient transport, transfer of equipment, body mechanics, surgical skin prep, urinary catheterization, surgical hand scrub technique, disinfection, microbiology, sterilization, electricity, information technology, professionalism, ethics, and communication skills are covered. Preoperative case management skills will be introduced. Application of knowledge and skills occurs in the surgical technology laboratory, in addition to recognition of general surgery instrumentation in major and minor surgical trays. Students must register for the laboratory co-requisite and successfully complete both components.

#### **Pre-reqs:**

SUR102L

Can be Taken Concurrently

# SUR102L Principles of Surgery I Lab

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course reviews the role of the surgical technologist pre-operatively. Proper patient identification, methods of patient transport, transfer of equipment, body mechanics, surgical skin prep, urinary catheterization, surgical hand scrub technique, disinfection, microbiology, sterilization, electricity, information technology, professionalism, ethics, and communication skills are covered. Preoperative case management skills will be introduced. Application of knowledge and skills occurs in the surgical technology laboratory, in addition to recognition of general surgery instrumentation in major and minor surgical trays. Students must register for the theory co-requisite and successfully complete both components

Pre-regs:

**SUR102** 



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## **Health and Human Services**

**Surgical** 

#### **SUR104** Surgical Pharmacology

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course is an introduction to pharmacological agents used in surgery including the administration of anesthesia and preoperative medications, types of anesthesia, complications, and alternative methods to anesthesia. The role of the surgical technologist during administration, as well as the care and handling of medications and solutions, will be covered.

## Pre-reqs:

BIO 122 Can be Taken Concurrently
Or BIO 123 Can be Taken Concurrently

#### SUR105 Surg Anatomy & Pathology

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course reviews surgical anatomy and pathology. The anatomy and pathology for each body system will be covered as it relates to surgical procedures and interventions. Emphasis on human anatomy and understanding the body in its three dimensions and the relationships of parts to one another will be emphasized with each surgical specialty.

# Pre-reqs:

And BIO121 Or BIO123 SUR102

# **SUR106** Principles of Surgery II

Credit Hours: 3 Contact Hours: 3 Lecture Hours: 3 Lab Hours: 0 Other Hours: 0

This course focuses on the scrub and circulating role of the surgical technologist with a strong emphasis on the intraoperative and post-operative roles. Diagnostic procedures, hemostasis, suture material, surgical needles, stapling equipment, dressings, and post-operative wound care are covered. Preoperative case management will continue with transition into intraoperative and post-operative case management skills. Application of knowledge and skills occurs in the surgical technology laboratory, in addition to recognition of instrumentation found in laparoscopic, gynecological, and general surgery major and minor surgical trays. Students must register for the laboratory co-requisite and successfully complete both components.

## Pre-reqs:

**SUR102** 

And SUR106L



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## **Health and Human Services**

**Surgical** 

# **SUR106L Principles of Surgery II Lab**

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course focuses on the scrub and circulating role of the surgical technologist with a strong emphasis on the intraoperative and post-operative roles. Diagnostic procedures, hemostasis, suture material, surgical needles, stapling equipment, dressings, and post-operative wound care are covered. Preoperative case management will continue with transition into intraoperative and post-operative case management skills. Application of knowledge and skills occurs in the surgical technology laboratory, in addition to recognition of instrumentation found in laparoscopic, gynecological, and general surgery major and minor surgical trays. Students must register for the theory co-requisite and successfully complete both components.

## Pre-reqs:

SUR102L

And SUR106

Can be Taken Concurrently

## SUR200 Surgical Specialties I

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course will cover the procedural steps, instrumentation, supplies, patient positioning used for various surgeries in specialties such as; general, OB/GYN, genitourinary, otorhinolaryngology, oral and maxillofacial, plastics and reconstructive, and robotic surgery. Pathology for these specialty areas include topics such as; disease processes, tumors, fluids, hemodynamic abnormalities, inflammation and infection. Application of knowledge and skills occurs in the surgical technology laboratory. Students must register for the laboratory co-requisite and successfully complete both components.

# Pre-reqs:

**SUR106** 

And SUR200L

Can be Taken Concurrently

## **SUR200L Surgical Specialties I Lab**

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course will cover the procedural steps, instrumentation, supplies, patient positioning used for various surgeries in specialties such as; general, OB/GYN, genitourinary, otorhinolaryngology, oral and maxillofacial, plastics and reconstructive, and robotic surgery. Pathology for these specialty areas include topics such as; disease processes, tumors, fluids, hemodynamic abnormalities, inflammation and infection. Application of knowledge and skills occurs in the surgical technology laboratory. Students must register for the theory co-requisite and successfully complete both components.

**Pre-reqs:** 

SUR106L

And SUR200



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## **Health and Human Services**

**Surgical** 

## SUR201 Surgical Clinic Prac I Sem

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The seminar component of Practicum I consists of sharing of clinical experiences. Students are required to keep a log of the surgical cases completed. Discussion forums and case studies are used to share information, discuss problems, and answer questions regarding the assigned surgical cases. Students must register for the clinical co-requisite and successfully complete both components.

Pre-reqs:

SUR201C Can be Taken Concurrently

# **SUR201C Surgical Clinic Prac I**

Credit Hours: 3 Contact Hours: 21 Lecture Hours: 0 Lab Hours: 21 Other Hours: 0

This course provides students with surgical clinical experience in the first and second scrub roles. Specific surgical cases in general and specialty areas are assigned. The main focus is on general, OB/GYN, genitourinary, otorhinolaryngology, and orthopedic procedures. Students are required to complete an accumulative total of 120 cases during Surgical Clinical Practicum I and II. Students must register for the seminar co-requisite and successfully complete both components.

#### Pre-regs:

**SUR200** 

And SUR200L

And SUR201

Can be Taken Concurrently

## **SUR202** Surgical Specialties II

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course covers the procedural steps, instrumentation, supplies and patient positioning used for various surgeries in specialties such as; ophthalmic, orthopedics, cardiovascular, peripheral vascular, and neurosurgery. Pathology for these specialty areas include topics such as; disease processes, tumors, fluids, hemodynamic abnormalities, inflammation, and infection. Application of knowledge and skills occurs in the surgical technology laboratory. Students must register for the laboratory co-requisite and successfully complete both components.

Pre-reqs:

**SUR200** 

And SUR202L



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## **Health and Human Services**

**Surgical** 

#### **SUR202L Surgical Specialties II Lab**

Credit Hours: 1 Contact Hours: 2 Lecture Hours: 0 Lab Hours: 2 Other Hours: 0

This course covers the procedural steps, instrumentation, supplies and patient positioning used for various surgeries in specialties such as; ophthalmic, orthopedics, cardiovascular, peripheral vascular, and neurosurgery. Pathology for these specialty areas include topics such as; disease processes, tumors, fluids, hemodynamic abnormalities, inflammation, and infection. Application of knowledge and skills occurs in the surgical technology laboratory. Students must register for the theory co-requisite and successfully complete both components.

Pre-reqs:

SUR200L

And SUR202

Can be Taken Concurrently

## SUR203 Surgical Clinc Prac II Sem

Credit Hours: 1 Contact Hours: 1 Lecture Hours: 1 Lab Hours: 0 Other Hours: 0

The seminar component of Practicum II consists of sharing of clinical experiences. Students are required to keep a log of the surgical cases completed. Discussion forums and case studies are used to share information, discuss problems, and answer questions regarding the assigned surgical cases. Students must register for the clinical co-requisite and successfully complete both components.

Pre-reqs:

SUR203C

Can be Taken Concurrently

## **SUR203C Surgical Clinic Prac II**

Credit Hours: 4 Contact Hours: 28 Lecture Hours: 0 Lab Hours: 28 Other Hours: 0

This course provides students with surgical clinical experience in the first and second scrub roles. Specific surgical cases in general and specialty areas are assigned. The main focus is on oral and maxillofacial, plastic and reconstructive, ophthalmic, cardiothoracic, peripheral vascular, and neurosurgery procedures. Students are required to complete an accumulative total of 120 cases during Clinical Practicum I and II. Students must register for the seminar co-requisite and successfully complete both components.

Pre-reqs:

SUR201C

And SUR203 Can be Taken Concurrently
And SUR204 Can be Taken Concurrently



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## **Health and Human Services**

**Surgical** 

# **SUR204** Surgical Technology Capstone

Credit Hours: 2 Contact Hours: 2 Lecture Hours: 2 Lab Hours: 0 Other Hours: 0

This course is an in-depth analysis of the students' clinical practicum experiences. Students will discuss surgical cases with classmates, as well as complete and present patient surgical case studies. Students will also develop a professional portfolio to aid in obtaining employment. In addition, this course will prepare students to take the certification exam to become a Certified Surgical Technologist upon graduation.

Pre-reqs:

SUR203C Can be Taken Concurrently

No Major

No Major

## AMZ999 Amazon Car Choice Placeholder

Credit Hours: 0 Contact Hours: 0 Lecture Hours: 0 Lab Hours: 0 Other Hours: 0

Amazon Car Choice Placeholder

Pre-regs: