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|   | ASSOCIATE OF APPLIED SCIENCE INDUSTRIAL TECHNOLOGY <i>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.</i> | 2023-24 Catalog Effective Summer 2023 <h1 style="margin: 0;">4300</h1> |
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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 |
|---|---|---------------------|--|------------------------|
| 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) or MTH107 | |
| IET270 | Dimensional Metrology and Inspection I [^] | 3 | (MTH025 or Proficiency) or MTH107 | |
| AIT139 | Introduction to Robotics | 2 | | |
| MST125 | Basic Pumps | 3 | | |
| MET225 | Manufacturing Processes | 3 | | |
| TECHNICAL ELECTIVES: 7 credit hours minimum (typically 2 to 3 classes) | | | | |
| | See Technical Elective list below. ² ## | 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) or Pre-Co-MTH007 | |
| ENG124 | College Composition [^] | 3 | Co-ENG024 or Co-ENG011 or Proficiency | |
| ENG221 | Technical Report Writing | 3 | ENG124 | |
| COM121 or COM123 | Effective Speaking or Small Group Communication [^] | 3 or 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. ¹ | 6 | Check for prerequisites | |
| | Total | 31 | | |
| | TOTAL CREDIT HOURS | 64 | | |

[^]Based on SSC placement scores

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

¹ Arts & Humanities and/or Social & Behavioral Sciences Electives: any course with the following catalog entry: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122, SOC, PSY

^{##}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.

² Technical Electives: see next page

TECHNICAL ELECTIVES: 7 credit hours minimum from the list below.

| Course Number | Course Title | Credits | Pre- and Co-Requisites | Completed Sem./Year |
|---------------|---|---------|-------------------------------|---------------------|
| AIT103 | Non-Destructive Testing | 2 | | |
| 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 | |
| AIT124 | Principles of Rigging | 2 | | |
| AIT125 | Commercial Plumbing | 3 | | |
| AIT220 | Industrial Robotics | 4 | | |
| DET125 | Basic AutoCAD | 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 | |
| CDL121 | CDL - Class A – Safe Operation and Control ## | 6 | | |
| CDL122 | CDL - Class A – Advanced Operations and Maintenance | 6 | CDL121 | |
| MST126 | Pipefitting Principles & Applications | 3 | | |
| MST127 | Principles of Welding | 6 | | |
| AIT137 | CAD/CAM | 4 | AIT122 and IET223 | |
| AIT134 | Preventive and Predictive Maintenance | 3 | | |
| MST135 | Plumb and Pipe Code Principles | 3 | | |
| EET123 | Electronic Devices and Circuits | 4 | EET120 or EST230 | |
| EET227 | PLC's and Industrial Controls I | 3 | EET120 or EST230 | |
| ETD225 | Engineering Special Topics | 1 | | |
| ETD226 | Engineering Special Topics | 2 | | |
| ETD227 | Engineering Special Topics | 3 | | |
| ETD228 | Engineering Special Topics | 4 | | |
| ETD229 | Engineering Special Topics | 5 | | |
| MST227 | Metallic Inert Gas Welding | 3 | MST127 | |
| ABC110 | Electrical Applications I | 6 | | |
| ABC120 | Electrical Applications II | 5 | | |
| 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 | | |

See page 1 for footnote specifics

PART-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering 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 part-time associate degree students who plan to finish in eight semesters.

| <u>First Semester</u> | | <u>Credit Hours</u> | <u>Pre- or Co-requisites</u> |
|--|--|---------------------|---|
| SSC101 | Student Success Seminar^^ | 1 | <i>Take first semester</i> |
| AIT101 | Basic Machines | 2 | |
| ITD122 | Computer Applications for Professionals^ | 3 | ITD100 or Proficiency |
| ENG124 | College Composition^ | <u>3</u> | Co-ENG024 or Co-ENG011 or Proficiency |
| | | 9 | |
| <u>Second Semester</u> | | | |
| MST121 | Blueprint Reading | 2 | |
| MTH107 | Industrial Math^ | 3 | (MTH021 or Proficiency) or Pre-Co-MTH007 |
| IET270 | Dimensional Metrology and Inspection I^ | <u>3</u> | (MTH025 or Proficiency) or MTH107 |
| | | 8 | |
| <u>Third Semester</u> | | | |
| MST134 | Hydraulic and Pneumatic Systems^ | 4 | MTH022 or MTH023 or Proficiency |
| EST230 | Electrical Circuits and Devices^ | <u>4</u> | (MTH025 or Proficiency) or MTH107 |
| | | 8 | |
| <u>Fourth Semester</u> | | | |
| IET121 | Industrial Management Concepts | 2 | |
| <i>Arts & Humanities and/or Social & Behavioral Sciences Electives¹</i> | | <u>6</u> | <i>Check for prerequisites</i> |
| | | 8 | |
| <u>Fifth Semester</u> | | | |
| MET123 | Material Science | 3 | |
| ENG221 | Technical Report Writing | 3 | ENG124 |
| PHY101 | Principles of Physics^ | <u>4</u> | (MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency) |
| | | 10 | |
| <u>Sixth Semester</u> | | | |
| COM121 | Effective Speaking | 3 | |
| or | or | or | |
| COM123 | Small Group Communication^ | 3 | IDS102 or Proficiency |
| AIT139 | Introduction to Robotics | 2 | |
| MET225 | Manufacturing Processes | <u>3</u> | |
| | | 8 | |
| <u>Seventh Semester</u> | | | |
| MST221 | Mechanical Drive Components | 3 | |
| MST125 | Basic Pumps | <u>3</u> | |
| | | 6 | |
| <u>Eighth Semester</u> | | | |
| <i>Technical Electives² ##</i> | | <u>7</u> | <i>Check for prerequisites</i> |
| | | 7 | |
| TOTAL CREDITS | | 64 | |

^Based on SSC placement scores

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

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²Technical Electives: see previous page