# ASSOCIATE OF APPLIED SCIENCE

# 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.*

**4353**

Stark State COLLEGE

MAP 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 | | |
| 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) **or** MTH107 | |
| MST134 | Hydraulic and Pneumatic Systems^ | 4 | MTH022 **or** MTH023 **or** Proficiency | |
| MST221 **or** MET225 | Mechanical Drive Components **or** Manufacturing Processes | 3 **or** 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 **or** AIT137 | Basic AutoCAD **or** CAD/CAM | 3 **or** 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) **or** Pre-Co-MTH007 | |
| EST230 | Electrical Circuits and Devices^ | 4 | (MTH025 **or** Proficiency) **or** MTH107 | |
| ENG124 | College Composition^ | 3 | Co-ENG024 **or** Co-ENG011 **or** Proficiency | |
| COM121 **or** COM123 | Effective Speaking **or** Small Group Communication^ | 3 **or** 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.[1]* | 3 | *Check for prerequisites* | |
| | **Total** | **33-34** | | |
| | **TOTAL CREDIT HOURS** | **63-64** | | |

^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: ENG233, ENG234, ENG236, ENG237, PHL122, any HIS course, any SOC course, or any PSY course.*

## 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.

| 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 |
| ENG124 | College Composition^ | 3 | Co-ENG024 **or** Co-ENG011 **or** Proficiency |
| | | **9** | |
| **Second Semester** | | | |
| AIT122 | Machine Tools | 4 | |
| MST121 | Blueprint Reading | 2 | |
| MTH107 | Industrial Math^ | 3 | (MTH021 or Proficiency) **or** Pre-Co-MTH007 |
| | | **9** | |
| **Third Semester** | | | |
| IET223 | Computer Numerical Control | 4 | |
| IET270 | Dimensional Metrology and Inspection I^ | 3 | (MTH025 or Proficiency) **or** MTH107 |
| AIT134 | Preventive and Predictive Maintenance | 3 | |
| | | **10** | |
| **Fourth Semester** | | | |
| MST221 | Mechanical Drive Components | 3 | |
| **or** | **or** | **or** | |
| MET225 | Manufacturing Processes | 3 | |
| AIT220 | Industrial Robotics | 4 | |
| | | **7** | |
| **Fifth Semester** | | | |
| PHY101 | Principles of Physics^ | 4 | (MTH024 **or** MTH025 **or** Proficiency) **or** MTH105 **or** MTH107 **and** (IDS102 **or** Proficiency) |
| EST230 | Electrical Circuits and Devices^ | 4 | (MTH025 or Proficiency) **or** MTH107 |
| | | **8** | |
| **Sixth Semester** | | | |
| IET121 | Industrial Management Concepts | 2 | |
| MST134 | Hydraulic and Pneumatic Systems^ | 4 | MTH022 **or** MTH023 **or** Proficiency |
| | | **6** | |
| **Seventh Semester** | | | |
| DET125 | Basic AutoCAD | 3 | |
| **or** | **or** | **or** | |
| AIT137 | CAD/CAM | 4 | AIT122 **and** IET223 |
| AIT221 | Advanced CNC Programming | 3 | IET223 **or** ARL121 **or** ARL122 |
| | | **6-7** | |
| **Eighth Semester** | | | |
| COM121 | Effective Speaking | 3 | |
| **or** | **or** | **or** | |
| COM123 | Small Group Communication^ | 3 | IDS102 **or** Proficiency |
| AIT226 | Robotic Vision | 2 | AIT220 |
| *Arts & Humanities and/or Social & Behavioral Sciences Elective[1]* | | 3 | *Check for prerequisites* |
| | | **8** | |
| **TOTAL CREDITS** | | **63-64** | |

^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: ENG233, ENG234, ENG236, ENG237, PHL122, any HIS course, any SOC course, or any PSY course.*