

Associate in Applied Science in Engineering Technology

Program Outcomes

Upon completion of this degree, students will be able to apply established scientific and engineering knowledge to the solutions of industrial problems.

Employment Opportunities or Additional Educational Options

With this degree, graduates typically seek work for major technological companies in areas which deal with application, manufacturing, implementation, engineering operating, sales and production. They are often the "implementers" of design and plans. Engineering technicians usually work as part of a team with the craftsman and the engineer, working closest to the engineer in the duties and responsibilities. Graduates with an associate degree often continue on to complete a bachelor's degree and become engineering technologists. This degree is designed to transfer into three different bachelor's degrees at Western Michigan University: Engineering Design Technology (EDT), Manufacturing Engineering Technology (MFT), or Engineering Management Technology (UEM).

To Learn More About This Program

Contact Andrew Dohm at (269) 782-1255 or adohm@swmich.edu.

Degree Requirements

To earn this degree, students must have an overall GPA of 2.0, fulfill the course requirements of the program listed below, and complete a minimum of 60 credit hours. Additionally, each general education course must be completed with a minimum grade of "C." Courses marked with an asterisk may be substituted for different courses with approval. Talk to an advisor for specific details.

General Education Courses

COMMUNICATIONS

Course ID	Course	Credits
ENGL 103 or 103W	Freshman English 2 (or with workshop)	3 to 4 credits
SPEE 104	Intro to Human Communication	3 credits

MATHEMATICS

Course ID	Course	Credits
MATH 130	Precalculus Mathematics	5 credits

NATURAL SCIENCE

Course ID	Course	Credits
CHEM 101	General Chemistry 1	5 credits
PHYS 101	Introductory Physics 1	5 credits

SOCIAL SCIENCE

Course ID	Course	Credits
ECON 202	Microeconomics*	3 credits
POSC 201	American Government*	3 credits

HUMANITIES

Course ID	Course	Credits
HUMA 210	Introduction to Non-Western Civilization*	4 credits
PHIL 201	Intro to World Religion*	3 credits

Major Specific Required Courses

Course ID	Course	Credits
EDUC 120	Educational Exploration and Planning	1 credit
CADD 101	Introduction to CAD/Auto CAD	4 credits
CADD 104	Engineering Graphics 2	4 credits
INTE 126	Intro to Manufacturing Systems	3 credits
INTE 140	Blueprint Reading	2 credits
MATH 141	Analytical Geometry and Calculus 1	5 credits
PHED 103	Life Wellness	2 credits
PHYS 102	Introductory Physics 2	5 credits

Complete One of the Following Courses

Course ID	Course	Credits
ACCO 201	Western Michigan University Elective for the Engineering Management Technology Program	4 credits
MATH 142	Western Michigan University Elective for the Engineering Design Technology Program	5 credits

Additional Notes About the A.A.S. Engineering Technology

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence section.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.

Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
EDUC 120 Educational Exploration and Planning	1 credit	CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed)
CADD 101 Intro to CAD/Auto CAD	4 credits	None
SPEE 104 Introduction to Human Communication	3 credits	CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed)
INTE 140 Blueprint Reading	2 credits	CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed)
ENGL 103 or 103W Freshman English 2 (or with workshop)	3 to 4 credits	CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed); ENGL 101 or test score

SECOND SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
CADD 104 Engineering Graphics 2	4 credits	INTE 140; MATH 098 or test score; CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed)
POSC 201 American Government	3 credits	CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed)
CHEM 101 General Chemistry 1	5 credits	MATH 127 or concurrent enrollment; CHEM 100 or HS Waiver; CRIT 103, CRIT 103W or test scores (concurrent enrollment allowed)
MATH 130 Precalculus Mathematics	5 credits	MATH 127 or test score

THIRD SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
INTE 126 Intro to Manufacturing Systems	3 credits	CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed)
MATH 141 Analytical Geometry Calculus 1	5 credits	MATH 130 or test score (or MATH 131 and MATH 136)
PHYS 102 Introductory Physics 1	5 credits	MATH 130 or test score (or MATH 131 and MATH 136)
HUMA 210 Introduction to Non-Western Civilization	4 credits	ENGL 103 or ENGL 103W; CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed)

FOURTH SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
PHYS 102 Introductory Physics 2	5 credits	PHYS 101
ECON 202 Microeconomics	3 credits	MATH 101, MATH 102, or test score.
PHED 103 Life Wellness	2 credits	None
PHIL 201 Introduction to World Religion	3 credits	CRIT 103, CRIT 103W, or test scores (concurrent enrollment allowed)
Elective for W.M.U. Program	4 to 5 credits	See Course Description for Details