

ASSOCIATE OF APPLIED SCIENCE IN MECHANICAL ENGINEERING TECHNOLOGY

The mechanical engineering technology (MET) program is designed as a "two-plus-two" program. Students may earn an Associate of Applied Science degree after two years of full-time study. With this degree, they may begin a career in industry. The associate degree graduate can continue for two more years of full-time study to earn the bachelor's degree.

The associate degree program introduces the student to the principles and practices of machine design, manufacturing processes, testing, and energy conversion. Students are also given a firm foundation in communications, mathematics, and science. Upon completion of the associate degree, graduates may find employment as engineering technicians in a wide variety of industries. They assist engineers in the design, drafting, testing, and support of mechanical products or of the industrial equipment and processes used to manufacture consumer products.

Program Educational Objectives

Educational objectives for the MET programs have been developed by faculty and the program industrial advisory committee to support the university, the college, and the School of Engineering Technology missions. Graduates of the MET associate degree program function as assistants in the design, drafting, and testing of mechanical products, equipment and processes. Bachelor's degree graduates assume greater responsibility in the design and testing of mechanical products, processes, and equipment.

During their first few years after completion of the mechanical engineering technology program at YSU, graduates will have demonstrated the ability to:

- Work competently in technical and professional careers related to the field of mechanical engineering technology.
- Communicate effectively in a professional environment.
- Continue growth in professional knowledge and skills.
- Achieve recognition and/or compensation consistent with their educational achievements.

Program Outcomes

MET students will demonstrate by the time of graduation:

- mastery of knowledge, skills, and tools of the discipline
- ability to apply knowledge to solve engineering problems
- ability to conduct, analyze, and interpret experiments
- ability to work effectively in teams
- ability to identify, analyze, and solve technical problems
- ability to communicate effectively
- recognition of the need for professional development
- ability to understand professional, ethical, social, and diversity responsibilities
- commitment to quality, timeliness, and continuous improvement

Accreditation and Registration

The mechanical engineering technology associate program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

Date of last campus visit: October, 2011

Accredited through: 2018

Next campus visit: October 2017

Link to accreditation body: ABET (<http://www.abet.org>)

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Course	Title	S.H.
Year 1		
Fall		
ENTC 1501	Introduction to Engineering Technology	2
ENTC 1505	Engineering Technology Concepts	4
MATH 1513	Algebra and Transcendental Function	5
DDT 1503	AutoCAD 1	2
DDT 1504	Drafting and Plan Reading	2
ENGL 1550	Writing 1	3
Semester Hours		18
Spring		
MET 1515	Mechanics 1	3
CCET 2604	Properties and Strength of Materials	3
CCET 2614L	Materials Laboratory 1	2
MATH 1570	Applied Calculus 1	4
DDT 2606	CAD Solid Modeling	4
Semester Hours		16
Year 2		
Fall		
MET 2616	Mechanics 2	3
MET 3714 & 3714L	Fluid Mechanics and Fluid Mechanics Laboratory	5
PHYS 1501	Fundamentals of Physics 1	4
Arts & Humanities GER ¹		3
Semester Hours		15
Spring		
MET 2630 & 2630L	Manufacturing Techniques and Manufacturing Techniques Laboratory	4
MET 3706	Machine Design 1	4
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	4
ENGL 1551	Writing 2	3
Social Science GER ¹		3
Semester Hours		18
Total Semester Hours		67

¹ General Education Requirement: see "Schedule of Classes" for details.
 SPA = Social & Personal Awareness (2 required for BSAS)
 SS = Social Sciences (2 required for BSAS)
 AH = Arts & Humanities (2 required for BSAS)