

MECHANICAL ENGINEERING TECHNOLOGY

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Mechanical Engineering Technicians help engineers design, develop, test, and manufacture mechanical devices, including tools, engines, and machines. They may make sketches and rough layouts, record and analyze data, make calculations and estimates, and report their findings. Often Mechanical Engineering Technicians design equipment and make working models to test. When involved in manufacturing, these technicians frequently determine the strength, quality, quantity, and cost of materials. Technicians who specialize in mechanical design may take the rough sketches produced by an engineer and convert them into detailed drawings. They might also provide illustrations and exploded views of machinery for operating or maintenance manuals. Mechanical engineering technicians also help engineers design, develop, test, and manufacture machinery, industrial robotics, and other equipment.

The curriculum provides the skills to become a mechanical engineering technician. Practical, hands-on, learning experience is incorporated with principle and theory. Students learn how to make sketches and rough layouts, record data, tabulate calculations, analyze results, and write informative reports. Those interested in the Mechanical Engineering Technology major should have an aptitude for mathematics, science, and technical work. Upon completion of the coursework, the student will receive an Associate of Applied Science Degree in Mechanical Engineering Technology.

Employment opportunities are excellent for individuals who have completed a two-year program in mechanical engineering technology. Completion of the degree prepares the graduate for entry into today's global industrial world in a number of job classifications such as design technicians, detailers, draftsmen, engineering technicians, lab technicians, metallurgical technicians, quality control technicians, troubleshooters, and test technicians. Graduates have the solid foundation needed to continue on to a bachelor's degree in engineering technology, engineering science, and eventually become a licensed Professional Engineer pursuant to the Ohio Revised Code.

Program Learning Outcomes

Upon completion, the student will be able to:

1. Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
2. Demonstrate an appreciation of the benefits that cultural diversity brings to a multidisciplinary team.
3. Write programs to operate sophisticated machinery.
4. Diagnose problems and provide correct, effective solutions.
5. Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here for details.

Tech Prep Partner

See here for details.

Mechanical Engineering Technology Associate of Applied Science Degree

First Year

First Semester		Hours
COM 1110	English Composition	3
PHY 1120	Physics I	4
SDE 1010	First Year Experience	1
MTH 1370	College Algebra	4
ENV 1300	OSHA Regulations and Safety	3

Term Hours 15

Second Semester

MTH 1430	Trigonometry	3
MET 1130	Statics	3
SOC 1010	Sociology	3
MET 1110	Manufacturing Processes	3
PHY 1130	Physics II	4

Term Hours 16


Second Year

First Semester

COM 2213	Verbal Judo	3
or GER 1011	or Conversational German	
or COM 2110	or Public Speaking	
MET 1000	Engineering Graphics with AutoCAD	3
MET 1020	Material Science	3
MET 2310	Fluid Power	3
TECHNICAL ELECTIVE		3
MET 2991	Field Experience	1

Term Hours 16

Second Semester

COM 1140	Technical Writing	3
MET 2210	Strength of Materials	3
MET 2440	Computer Aided Design	3
MET 2970 	MET Department Capstone	2
or EET 2970	or Electronic Engineering Technology Capstone	
TECHNICAL ELECTIVE		3

Term Hours 14

Total Hours 61

 Capstone course

See here Portfolio and Capstone information.

Prerequisites:

Students should check course prerequisites before registering.

Technical Electives:

Code	Title	Hours
AMT 1100	Welding and Fabrication	3
EET 1110	Circuit Analysis I	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2130	Industrial Mechatronics and Robotics	3

2 Mechanical Engineering Technology

GET 1500	Special Topics in Engineering Technology	1-10
IMT 2820	Mechanical Power Transmission Systems	2
MET 1010	Blueprint Reading and Sketching	3

Rhodes State College's Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.