Mechanical Engineering Technologies

The Mechanical Engineering Technologies Department at Cincinnati State offers associate's degree programs in Mechanical Engineering Technology (MET), with majors in Design and Manufacturing Management. These degrees provide students with an education that leads to many career opportunities in the field of product design and manufacturing. Graduates may be involved in the creation of consumer products, toys, electronic equipment, medical equipment, machine tools, appliances, or automotive and aerospace applications. Students work with state-of-the-art technologies that are used worldwide in the design and manufacturing of products.

Many MET graduates continue their education for a bachelor's degree after receiving their associate's degree from Cincinnati State.

Mechanical Engineering Technology

Students in the Mechanical Engineering Technology program learn to use the latest technology to design and manufacture devices and systems for use in consumer products, machine tools, automotive, and aerospace industries. Graduates of the MET program are prepared to design mechanical systems, operate CAD systems, manage design projects, and perform product testing. Examples of program graduate job titles include product designer, CAD/CAM system specialist, product support manager, design engineering technician, or project engineering technician.

MET is a two-year Associate of Applied Science program that includes majors in MET-Design and MET-Manufacturing Management. The Mechanical Engineering Technology program prepares graduates to successfully enter and pursue baccalaureate degrees and to enter and advance professionally through technical and mid-management positions in local industry.

The Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone (410) 347-7700.

Mechanical Engineering Technology—Design Major (METD)

Students in the Mechanical Engineering Technology—Design major learn to use the latest technology to design and manufacture devices and systems for consumer products, machine tools, and the automotive and aerospace industries. MET—Design is the traditional Mechanical Engineering Technology program. The curriculum prepares students to solve real-world problems from concept to completion using logical thinking as well as computer software, including computer-aided design (CAD) and computer-aided engineering (CAE). Graduates are well prepared to continue their education in an MET bachelor's degree program.

Mechanical Engineering Technology—Manufacturing Management Major (METM)

In the MET Manufacturing Management major, students learn the technologies and skills needed to manage a high-tech production facility. The curriculum includes hands-on manufacturing processes, state-of-the-art Computer-Aided Drafting / Computer-Aided Machining (CAD/CAM), Computer Numerical Control (CNC), and materials and quality control analysis using statistical process control (SPC). This associate's degree program prepares students for immediate employment in a production facility or for easy transition to bachelor's degree studies.

Mechanical Engineering Technology—Design Major (METD)

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 12 credit hours taken at Cincinnati State.

Semester 1		**Credits**
PSY 100	Applied Psychology: Human Relations	3
MET 100	Introduction to Mechanical Engineering Technology	2
ENG 101	English Composition	3
MET 111	Manufacturing Processes 1	3
MAT 125	Algebra and Trigonometry	4
MET 131	MET Computer Aided Drafting 1	3
Semester 2		
ENG 10X English Composition Elective		3
MAT 126	Functions and Calculus	4
MET 132	MET Computer Aided Drafting 2	3
MET 140	Engineering Materials	3
MET 150	Statics and Strength of Materials for MET	3
Semester 3		
MET 291	Full-Time Cooperative Education 1: Mechanical Engineering Technology	2

Semester 4		
PHY 151	Physics 1: Algebra and Trigonometry-Based	4
MET 160	Electrical Applications for MET	3
MET 240	Hydraulics and Pneumatics	3
MET 250	Machine Design	4
MET 285	Mechanical Engineering Technology Capstone Project 1	3
Semester 5		
COMM 110	Public Speaking	3
CULT 110	Social Issues in Technology	3
MET 260	Applied Thermodynamics	3
MET 270	Kinematics	3
MET 290	Mechanical Engineering Technology Capstone Project 2	3
Semester 6		
MET 292	Full-Time Cooperative Education 2: Mechanical Engineering Technology	2
Total Credits:		70

Electives

English Composition Elective		
ENG 102	Composition and Argument	3
ENG 104	Composition and Technical Communication	3
ENG 105	Composition and Business Communication	3

Mechanical Engineering Technology— Manufacturing Management Major (METM)

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 12 credit hours taken at Cincinnati State.

Semester 1		**Credits**
PSY 100	Applied Psychology: Human Relations	3
MET 100	Introduction to Mechanical Engineering Technology	2
ENG 101	English Composition	3
MET 111	Manufacturing Processes 1	3
MAT 125	Algebra and Trigonometry	4
MET 131	MET Computer Aided Drafting 1	3
Semester 2		
MET 112	Manufacturing Processes 2	4
MAT 126	Functions and Calculus	4
MET 132	MET Computer Aided Drafting 2	3
MET 140	Engineering Materials	3
MET 150	Statics and Strength of Materials for MET	3
Semester 3		
MET 291	Full-Time Cooperative Education 1: Mechanical Engineering Technology	2
Semester 4		
ENG 10X English Composition Elective		3
MET 113	Manufacturing Processes 3	4
MET 160	Electrical Applications for MET	3
MET 240	Hydraulics and Pneumatics	3
MET 285	Mechanical Engineering Technology Capstone Project 1	3
Semester 5		
CULT 110	Social Issues in Technology	3
COMM 110	Public Speaking	3
PHY 151	Physics 1: Algebra and Trigonometry-Based	4
MET 230	Quality Control and Six Sigma	4

MET 290	Mechanical Engineering Technology Capstone Project 2	3
Semester 6		
MET 292	Full-Time Cooperative Education 2: Mechanical Engineering Technology	2
Total Credits:		72

Electives

English Composition Elective

ENG 102	Composition and Argument	3
ENG 104	Composition and Technical Communication	3
ENG 105	Composition and Business Communication	3