

# Electro-Mechanical Engineering Technology (EMET)

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The Electro-Mechanical Engineering Technology program at Cincinnati State is the largest of its kind in Ohio. The program combines electronics engineering technology and mechanical engineering technology, so students develop skills that are highly valued by industrial firms, including a focus on industrial automation. Students gain competencies in controlling systems, linking software and hardware maintaining systems, and improving machines and systems.

Graduates earn an Associate of Applied Science degree and are also prepared to pursue a bachelor's degree in fields such as electronics engineering, electrical engineering, or electro-mechanical engineering.

The program has received a Program Excellence Award from the Ohio Department of Higher Education.

For more information, please contact the Center for Innovative Technologies at (513) 569-1743.

To apply for this program at Cincinnati State, visit our Admissions Page (<http://www.cincinnati-state.edu/academics/admission>)

## Electro-Mechanical Engineering Technology (EMET)

Semester 1		Lec	Lab	Credits
EMET 150	Introduction to Controls and Robotics ( <b>B</b> )	1	2	2
CIT 105	OSHA 10 General Industry Safety ( <b>B</b> )	1	0	1
EET 131	Circuit Analysis 1 ( <b>T</b> )	3	2	4
PSET 110	Power Systems Computer Aided Drafting ( <b>B</b> )	2	3	3
MAT XXX	Mathematics Elective 1 ( <b>G</b> )	3	2	4
FYE 1XX	First Year Experience Elective ( <b>B</b> )	1	0	1
Semester 2				
EMET 180	Process Instrumentation ( <b>T</b> )	2	3	3
EET 132	Circuit Analysis 2 ( <b>T</b> )	3	2	4
ENG 101	English Composition 1 ( <b>G</b> )	3	0	3
MET 111	Manufacturing Processes 1 ( <b>B</b> )	2	3	3
MAT XXX	Mathematics Elective 2 ( <b>B</b> )	3	2	4
Semester 3				

XXX XXX	Cooperative Education or Transfer Elective 1 ( <b>T</b> )	1	40	2
Semester 4				
EMET 240	Programmable Logic Controllers, Motors, Motor Controls, and Kinematics ( <b>T</b> )	2	3	3
EMET 245	Laser 1 ( <b>T</b> )	2	3	3
PHY XXX	Physics Elective ( <b>G</b> )	3	3	4
ENG 10X	English Composition Elective ( <b>G</b> )	3	0	3
Semester 5				
EMET 270	Robotics and Servomechanisms ( <b>T</b> )	3	3	4
EMET 275	Electric Drive Mechanisms ( <b>T</b> )	3	3	4
MET 150	Statics and Strength of Materials for MET ( <b>T</b> )	2	3	3
XXX XXX	Arts/ Humanities or Social/ Behavioral Science Elective ( <b>G</b> )	3	0	3
Semester 6				
XXX XXX	Cooperative Education or Transfer Elective 2 ( <b>T</b> )	1	40	2
<b>Total Credits:</b>		47	117	63

## Electives

### First Year Experience Elective

FYE 100	College Survival Skills	1
FYE 105	College Success Strategies	2
FYE 110	Community College Experience	3

### Mathematics Electives

Select one of the following series:

MAT 125 & MAT 126	Algebra and Trigonometry and Functions and Calculus	
Or		
MAT 251 & MAT 252	Calculus 1 and Calculus 2	

### Physics Elective

PHY 151	Physics 1: Algebra and Trigonometry-Based	4
PHY 201	Physics 1: Calculus-Based	5

### English Composition Elective

ENG 102	English Composition 2: Contemporary Issues	3
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ENG 104	English Composition 2: Technical Communication	3
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**Arts/Humanities or Social/Behavioral Science Elective**

Any ECO, GEO, HST, LBR, LIT, PHI

**Cooperative Education or Transfer Electives \***

EMET 291	Full-Time Cooperative Education 1: Electro-Mechanical Engineering Technology	2
EMET 292	Full-Time Cooperative Education 2: Electro-Mechanical Engineering Technology	2
EET 121	Digital Systems 1	3
ESET 251	Electronics	4
MET 140	Engineering Materials	3

\* Program Chair approval is required for students planning to take a Transfer Elective course rather than participate in cooperative education.

The letters G, B, and T (displayed after course titles or elective descriptions) identify types of courses required by the Ohio Department of Higher Education as part of an associate's degree curriculum.

G = General Education course in this curriculum

B = Basic Skills course in this curriculum

T = Technical course in this curriculum

## Faculty

### Program Chair/Advisor

Professor Lawrence (Larry) Feist, BS  
lawrence.feist@cincinnatiatstate.edu

### Co-op Coordinator

Professor Sue Dolan, M.Ed.  
sue.dolan@cincinnatiatstate.edu