Electro-Mechanical Engineering Technology - Alternative Energy Major (EMETE)

Electro-Mechanical Engineering Technology—Alternative Energy Major (EMETE)

Graduates with the Electro-Mechanical Engineering Technology - Alternative Energy Major are prepared to address the needs of several related and growing industries related to energy efficiency, reduction of energy use in commercial and industrial applications, and electric drive systems found in passenger and off-highway electric vehicles. Students develop understanding of these new technologies along with foundation studies in traditional electro-mechanical engineering technology.

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

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.cincinnatistate.edu/academics/admission)

Electro-Mechanical Engineering Technology—Alternative Energy Major (EMETE)

Semester 1		**Lec**	**Lab**	**Credits**
EMET 150	Introduction to Controls and Robotics (**B**)	1	2	2
CIT 105	OSHA 10 General Industry Safety (**B**)	1	0	1
EET 131	Circuit Analysis 1 (**T**)	3	2	4
PSET 110	Power Systems Computer Aided Drafting (**B**)	2	3	3
FYE 1XX	First Year Experience Elective (**B**)	1	0	1
MAT XXX	Mathematics Elective 1 (**G**)	3	2	4
Semester 2				
EMET 180	Process Instrumentation (**T**)	2	3	3
EET 132	Circuit Analysis 2 (**T**)	3	2	4
ENG 101	English Composition 1 (**G**)	3	0	3
MET 111	Manufacturing Processes 1 (**B**)	2	3	3
MAT XXX	Mathematics Elective 2 (**B**)	3	2	4
Semester 3				
XXX XXX	Cooperative Education or Transfer Elective 1 (**T**)	1	40	2
Semester 4				
EMET 210	Energy Efficiency and Audits (**T**)	2	2	3
EMET 240	Programmable Logic Controllers, Motors, Motor Controls, and Kinematics (**T**)	2	3	3
EMET 245	Laser 1 (**T**)	2	3	3
ENG 10X	English Composition Elective (**G**)	3	0	3
PHY XXX	Physics Elective (**G**)	3	2	4
Semester 5				
EMET 225	Solar and Renewable Energy (**T**)	2	3	3
EMET 275	Electric Drive Mechanisms (**T**)	3	3	4
MET 150	Statics and Strength of Materials for MET (**T**)	2	3	3
XXX XXX	Arts/ Humanities or Social/ Behavioral Science Elective (**G**)	3	0	3
Semester 6				
XXX XXX	Cooperative Education or Transfer Elective 2 (**T**)	1	40	2
Total Credits:		48	118	65

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		8
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	

English Composition Elective		
ENG 102	English Composition 2: Contemporary Issues	3
ENG 104	English Composition 2: Technical Communication	3
Physics Elective		
PHY 151	Physics 1: Algebra and Trigonometry-Based	4
PHY 201	Physics 1: Calculus-Based	5
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
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Co-op Coordinator

Professor Sue Dolan, M.Ed.
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