

ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY

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The Electro-Mechanical Engineering Technology Program offers students the opportunity to build a career maintaining integrated manufacturing systems found in advanced manufacturing. The program leads students through a mechatronics approach to maintaining and troubleshooting highly-automated, complex manufacturing systems that include programmable logic controllers, robots, various types of drives, sensors, photoeyes, and electrohydraulics and electropneumatics. Graduates will be able to work as technicians in most manufacturing settings.

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 for 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.

Electro-Mechanical Engineering Technology

Associate of Applied Science Degree

First Year

First Semester		Hours
COM 1110	English Composition	3
SDE 1010	First Year Experience	1
EET 1110	Circuit Analysis I	3
PHY 1120	Physics I	4
MTH 1370	College Algebra	4
Term Hours		15

Second Semester

MTH 1430	Trigonometry	3
MET 1130	Statics	3
SOC 1010	Sociology	3
EET 1120	Circuit Analysis II	3
MET 1110	Manufacturing Processes	3
TECHNICAL ELECTIVE		
Term Hours		15

Second Year

First Semester

MET 1020	Material Science	3
EET 1330	Digital Circuits	4
MET 2991	Field Experience	1
	or EET 2991 or Field Experience	
TECHNICAL ELECTIVE		3
TECHNICAL ELECTIVE		3
Term Hours		14

Second Semester

COM 1140	Technical Writing	3
PHY 1130	Physics II	4
EET 1130	Electronics	4
MET 1000	Engineering Graphics with AutoCAD	3
MET 2210	Strength of Materials	3
MET 2970	MET Department Capstone	2
	or EET 2970 or Electronic Engineering Technology Capstone	
TECHNICAL ELECTIVE		
Term Hours		19
Total Hours		63

 Capstone

Technical Electives:

Code	Title	Hours
AIM 1000	Introduction to Artificial Intelligence	3
AMT 1100	Welding and Fabrication	3
EET 2030	Motor Controls	3
EET 2200	Panel Wiring and Arc Flash Safety	3
EET 2900	Electric Codes and Application	2
EET 2911	Programmable Logic Controllers	3
EET 2920	Advanced Programmable Controllers	3
ENV 1300	OSHA Regulations and Safety	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2130	Industrial Mechatronics and Robotics	3
GET 1500	Special Topics in Engineering Technology	1-10
IMT 2170	Industrial Motor Drives	2
MET 2310	Fluid Power	3
FMS 2210	CAM/CNC Machining I	3
FMS 2220	CAM/CNC Machining II	3

 Capstone Course