Electro-Mechanical Engineering Technology Concentration (9417)

Associate of Applied Science Degree

Electro-Mechanical Engineering Technology graduates are prepared with the technical skills necessary to enter careers in the building, installation, application, and operation and/or maintenance of electro-mechanical hardware and software systems.

Note: Students transferring to a four-year college are encouraged to take ENGL 1120 English Composition II *in addition to the following requirements.*

Course	Title	Credit Hours
First Semester		
CIMN 1110	Machining Processes	3
ELEC 1120	Direct Current Circuit Analysis	2
ENGL 1110 or ENGL 1111	English Composition I (A) [1] or English Composition I (B)	3
ENGR 1000	Introduction to Engineering Technology	2
FYEX 1000	First Year Experience	1
MATH 1180	Technical Mathematics I [2]	4
	Credit Hours	15
Second Semester		
CIMN 1210	Materials Processing	3
ELEC 1220	Alternating Current Circuit Analysis	2
ELEC 1260	Direct Current and Alternating Current Laboratory	1
ELEC 1330	Digital Systems Fundamentals	2
MATH 1280	Technical Mathematics II [2]	4
MECT 2110	Engineering Mechanics I	3
PHYS 1100	Applied Physics Mechanics	3
	Credit Hours	18
Third Semester		
ELEC 2821	Programmable Logic Controllers	3
MECT 2210	Engineering Mechanics II	3
MECT 2230	Strength of Materials	3
PHYS 1200	Applied Physics Heat and Thermodynamics	3
Select course(s) from the Arts and Humanities Electives list		3
	Credit Hours	15
Fourth Semester		
COMM 1000 or COMM 1100	Effective Public Speaking or Effective Interpersonal Communications	3
ELEC 2300	Sensors, Actuators, and Control	3
ELEC 2700	Motor Control and Servo Systems	3
ELEC 2850	Advanced Programmable Logic Controller Applications	2
Select course(s) from the Social and Behavioral Electives list		3
Select course(s) from the Technical Electives list		2
	Credit Hours	16
	Total Credit Hours	64

1 English course selection is based on placement test results (ENGL 1111 English Composition I (B) is 4 credits, only 3 credits apply to the degree).

2 Students planning to transfer to a four-year university should consider taking MATH 1650 College Algebra and MATH 1700 Trigonometry

This course is designated as a technical course in the program. Students must earn a "C" grade or higher in the course to fulfill the college's graduation requirements policy.

Electives

Course	Title	Credit Hours
Technical Electives		
CIMN 2390	Fluid Power Technology	3
MECT 2600	Design of Machine Elements	2
Arts and Humanities Electives		
ARTS 1120	Art Appreciation	3
ARTS 2220	Survey of Art I	3
ARTS 2230	Survey of Art II	3
ENGL 2250	Survey of American Literature I	3
ENGL 2260	Survey of American Literature II	3
ENGL 2280	Survey of British Literature I	3
ENGL 2290	Survey of British Literature II	3
HUMX 1100	Introduction to Humanities	3
HUMX 1200	The American Experience in the Arts	3
MUSC 1200	Music Appreciation	3
MUSC 1215	World Music	3
MUSC 1800	Popular Music: Rock, Jazz, Country, and Hip-Hop	3
MUSC 2200	Music History and Literature I	3
MUSC 2250	Music History and Literature II	3
PHIL 1500	Introduction to Philosophy	3
PHIL 2000	Comparative Religion	3
PHOT 1000	History of Photography	3
Social and Behavioral Sciences Electives		
ANTH 1160	Introduction to Cultural Anthropology	3
ECON 1150	Basic Economics	3
ECON 2500	Principles of Macroeconomics	3
ECON 2600	Principles of Microeconomics	3
GEOG 1500	Introduction to Geography	3
GEOG 1600	World Regional Geography	3
GEOG 2500	World Cultural Geography	3
HIST 1150	Western Civilization I: Antiquity Through the Reformation	3
HIST 1250	Western Civilization II: Age of Revolution Through the Present	3
HIST 2150	U.S. History: Colonization Through Reconstruction	3
HIST 2250	U.S. History: Reconstruction to the Present	3
POLS 1300	U.S. National Government	3
POLS 2500	Modern Political Ideologies	3
PSYC 1500	Introduction to Psychology	3
SOCY 1150	Principles of Sociology	3