

ENGINEERING WITH EMPHASIS IN ELECTRICAL ENGINEERING APPLICATIONS LEVEL - 2 (CERTIFICATE T0837)

Natural Sciences Division Certificate T0837

The Engineering with Emphasis in Electrical Engineering Applications Level – 2 certificate is designed to incorporate the engineering, science, and communications skills needed to prepare students for multiple entry-level positions in the electrical engineering field.

Required Courses

Course Prefix	Course Name	Units
Completion of Engineering Fundamentals coursework		
16-17		
PLUS		
Completion of Engineering with Emphasis in Electrical Engineering Applications - Level 1 coursework		
12.5-13		
PLUS		
Completion of Engineering with Emphasis in Electrical Engineering Applications - Level 2 coursework		
7.5 - 8		
Total Units		36-38

Course Prefix	Course Name	Units
Engineering Fundamentals Coursework		
ENGL 1A	Freshman Composition	4
or ENGL 1AH	Freshman Composition - Honors	
or ENGL 1AM	College Composition for Non-Native English Speakers	
or AMLA 1A	College Composition for Non-Native English Speakers	
ENGR 1	Introduction to Engineering	2
ENGR 1C	Engineering Critical Thinking	3
MATH 150	Trigonometry	3
or MATH 160	Precalculus Mathematics	
or MATH 180	Calculus and Analytic Geometry I	
PHYS 2AG	General Physics	4
Total Units		16-7

Course Prefix	Course Name	Units
Engineering with Emphasis in Electrical Engineering Applications - Level 1 Coursework		
CHEM 50	General Chemistry I	5
or CHEM 50H	General Chemistry I - Honors	
or CHEM 55	Chemistry for Engineers	
CSCI 110	Fundamentals of Computer Science	3.5
or ENGR 6	Introduction to Engineering Programming Concepts and Methodologies	
SPCH 1A	Public Speaking	4
or SPCH 1AH	Public Speaking - Honors	
Total Units		12.5-13

Course Prefix	Course Name	Units
Engineering with Emphasis in Electrical Engineering Applications - Level 2 Coursework		

CSCI 140	C++ Language and Object Development	4
or CSCI 220	Data Structures I	
or ENGR 16	Introduction to Digital Electronics with FPGA Programming	
MATH 181	Calculus and Analytic Geometry II	4
Total Units		7.5-8

Please see the Mt. San Antonio College Engineering, Engineering Technology and Surveying Program Website (<https://www.mtsac.edu/engineering/>) for updated information on program courses, transfer help, extracurricular activities, faculty contact information and more.

Program Learning Outcomes

Review Student Learning Outcomes (SLOs) (<http://www.mtsac.edu/instruction/outcomes/sloinfo.html>) for this program.