

ENGINEERING WITH EMPHASIS IN CHEMICAL AND MATERIALS ENGINEERING APPLICATIONS (AS DEGREE S0829)

Natural Science Division Degree S0829

The Engineering with Emphasis in Chemical and materials Engineering Applications AS degree is designed to incorporate the engineering, science, and communication skills needed to prepare students for multiple entry-level positions in the chemical and materials engineering field. This degree may facilitate transfer to a 4-year institution.

Course Prefix	Course Name	Units
Required Core		26-27
ENGR 1	Introduction to Engineering	2
ENGR 1C	Engineering Critical Thinking	3
ENGR 6	Introduction to Engineering Programming Concepts and Methodologies	4
or ENGR 7	Programming Applications for Engineers	
CHEM 55	Chemistry for Engineers	5
or CHEM 50	General Chemistry I	
or CHEM 50H	General Chemistry I - Honors	
ENGR 8	Properties of Materials	4
MATH 160	Precalculus Mathematics	4
or MATH 180	Calculus and Analytic Geometry I	
PHYS 2AG	General Physics	4-5
or PHYS 4A	Engineering Physics	
Required Electives		
Choose a minimum of 12 units		12
CHEM 51	General Chemistry II	
or CHEM 51H	General Chemistry II - Honors	
CHEM 80	Organic Chemistry I	
CHEM 81	Organic Chemistry II	
ENGR 40	Statics	
ENGR 40T	Applied Statics	
ENGR 50A	Robotics Team Project Development	
ENGR 50B	Intermediate Robotics Team Project Development	
ENGR 285	Differential Equations and Linear Algebra for Engineers	
PHYS 2BG	General Physics	
PHYS 4B	Engineering Physics	
Total Units		38-39

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.