

SALES ENGINEERING (AS DEGREE S0852)

Natural Science Division

The Sales Engineering program is designed to prepare the student for a career in a wide range of industries including sales engineering, technical sales and technical customer service. Technical Sales courses and additional requisite coursework may facilitate industry employment.

Required Courses

Course Prefix	Course Name	Units
Core courses		
ENGT 10A	Foundations of Technical Sales	2
ENGT 10B	Technical Sales Strategies	2
And completion of an AS Engineering with Emphasis in Engineering Applications AS		

Course Prefix	Course Name	Units
Engineering with Emphasis in Mechanical Engineering Applications AS		
36-37		
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	
ENGR 8	Properties of Materials	4
ENGR 18	Introduction to Engineering Graphics	3
ENGR 24	Engineering Graphics	4
CHEM 50	General Chemistry I	5
or CHEM 50H	General Chemistry I - Honors	
or CHEM 55	Chemistry for Engineers	
PHYS 2AG	General Physics	4
or PHYS 4A	Engineering Physics	
Required Electives: Choose at least 7 units		
ENGR 40	Statics	7
ENGR 40T	Applied Statics	
ENGR 41	Dynamics	
ENGR 42	Mechanics of Materials	
ENGR 44	Electrical Engineering	
ENGR 50A	Robotics Team Project Development	
ENGR 50B	Intermediate Robotics Team Project Development	
PHYS 2BG	General Physics	
PHYS 4B	Engineering Physics	

Course Prefix	Course Name	Units
Engineering with Emphasis in Software Engineering Applications AS		
27.5-29		
ENGR 1	Introduction to Engineering	2
ENGR 1C	Engineering Critical Thinking	3
ENGR 6	Introduction to Engineering Programming Concepts and Methodologies	4
ENGR 16	Introduction to Digital Electronics with FPGA Programming	4
CSCI 110	Fundamentals of Computer Science	3.5
CSCI 150	Assembly Language/Machine Architecture	3.5
CSCI 220	Data Structures I	3.5
or CSCI 240	Data Structures and Algorithms	

MATH 160	Precalculus Mathematics	4
or MATH 180	Calculus and Analytic Geometry	

Course Prefix	Course Name	Units
Engineering with Emphasis in Civil Engineering Applications AS		
36-37		
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	
ENGR 8	Properties of Materials	4
ENGR 24	Engineering Graphics	4
CHEM 50	General Chemistry I	5
or CHEM 50H	General Chemistry I - Honors	
or CHEM 55	Chemistry for Engineers	
MATH 180	Calculus and Analytic Geometry	4
or MATH 181	Calculus and Analytic Geometry	
PHYS 2AG	General Physics	4
or PHYS 4A	Engineering Physics	
SURV 1A	Surveying	3
SURV 1B	Surveying	3
Required Electives: Choose a minimum of 10 units		10
ENGR 18	Introduction to Engineering Graphics	
ENGR 40	Statics	
ENGR 40T	Applied Statics	
ENGR 41	Dynamics	
ENGR 42	Mechanics of Materials	
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	

Course Prefix	Course Name	Units
Engineering with Emphasis in Electrical Engineering Applications AS		
41		
ENGR 1	Introduction to Engineering	2
ENGR 6	Introduction to Engineering Programming Concepts and Methodologies	4
ENGR 16	Introduction to Digital Electronics with FPGA Programming	4
ENGR 44	Electrical Engineering	4
ENGR 285	Differential Equations and Linear Algebra for Engineers	4
MATH 180	Calculus and Analytic Geometry	4
MATH 181	Calculus and Analytic Geometry	4
MATH 280	Calculus and Analytic Geometry	5
PHYS 4A	Engineering Physics	5
PHYS 4B	Engineering Physics	5

Course Prefix	Course Name	Units
Engineering with Emphasis in Chemical and Materials Engineering Applications AS		
30-45		
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	
ENGR 8	Properties of Materials	4

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CHEM 50	General Chemistry I	5
or CHEM 50H	General Chemistry I - Honors	
or CHEM 55	Chemistry for Engineers	
MATH 160	Precalculus Mathematics	4
or MATH 180	Calculus and Analytic Geometry	
PHYS 2AG	General Physics	4
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	

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.