

## Bachelor of Science in Engineering Management<sup>†</sup>

### Department of Systems and Industrial Engineering

#### Mapping of Courses and Activities to Program Outcomes

Program Outcomes							
Curriculum	The graduate can apply knowledge of mathematics and science to solve problems.	The graduate can apply fundamental engineering science to technical problem solving.	The graduate understands the role of human relations in the management of operations.	The graduate can apply the tools of operation and project management.	The graduate can prepare financial analysis of projects, operations and firms.	The graduate has the ability to communicate verbally and in writing.	The graduate has in-depth knowledge of a technical field.
<b>General Education</b>							
ENGL 101, 102						X	
TRAD Courses			X			X	
INDV Courses			X			X	
<b>Mathematics &amp; Science</b>							
Math 125, 129, 223, 254	X						
SIE 305 Intro to Engr. Prob. & Stat.	X						
Chem 151	X						
Chem 152	X						
Phys 141, 241	X						

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<sup>†</sup> Accredited by the Engineering Accreditation Commission of ABET,  
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<b>Management</b>							
SIE 265 Engineering Management I					X		
SIE 340 Deterministic Operations Research		X		X			
SIE 415 Technical Sales and Marketing			X			X	
SIE 431 Simulation Modeling and Analysis		X					
SIE 462 Production Systems Analysis		X		X			
SIE 467 Engineering Management II			X	X	X	X	

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<b>Management</b>							
ENGR 495S						X	
SIE 498 A&B Senior Design Projects		X		X	X	X	
ECON 330 Macroeconomic Institutions and Policy					X		
ENGR 454 Law for Engineers and Scientists			X				
COMM 312 Applied Organizational Communication			X			X	
SOC 326 Work and Society			X				
MIS 465 Managing for Quality Improvement				X			

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<b>Engineering</b>							
ENGR 102 Introduction to Engineering	X	X					
ECE 175 Computer Programming for Engineering Applications		X					
ECE 207 Elements of Electrical Engineering		X					
CE 214 Statics		X					
CHEE 201 Elements of Chemical Engineering I		X					
Engineering Minors & Technical Electives		X					X