BACHELOR OF SCIENCE IN ENGINEERING - ENGINEERING MANAGEMENT

Engineering Management

Engineering Management is a multidisciplinary engineering program that combines narrow, focused depths in industrial engineering, business, and management. First, students complete a core set of engineering courses to provide a solid foundation in computer, electrical, industrial, and mechanical engineering principles. Then, Engineering Management students complete a set of twelve upper-level concentration courses. Six required concentration courses provide depth in industrial engineering and math. Students customize their program's depth with a selection of six concentration electives from a range of industrial engineering, management, and business courses.

The plan of study shown below incorporates the six required Engineering Management courses into the BSE's general plan of study. The six courses labeled "Concentration Elective Course" refer to the selections from the "Select One of the Following" and "Select Five of the Following" categories shown on the Engineering's Curriculum page.

Course	Title	Credit Hours
Freshman I		
CILE-101	First Year Foundations	1
COMM-101	Rhetoric & Writing	4
CHEM-135	Principles of Chemistry	3
CHEM-136	Principles of Chemistry Lab	1
MATH-101	Calculus I	4
IME-100 or ECE-100	Interdisciplinary Design and Manufacturing or Principles of Electrical and Computer Engineering	4
	Credit Hours	**17**
Freshman II		
ENGR-101	Computational Thinking	4
IME-100 or ECE-100	Interdisciplinary Design and Manufacturing or Principles of Electrical and Computer Engineering	4
MATH-102	Calculus II	4
MATH-158	Foundations of Probability & Statistics	4
	Credit Hours	**16**
Sophomore I		
ECON-201	Economic Principles	4
MATH-203	Multivariate Calculus	4
MECH-207	Materials Engineering	4
PHYS-114	Newtonian Mechanics	3
PHYS-115	Newtonian Mechanics Laboratory	1
	Credit Hours	**16**
Sophomore II		
EE-210	Engineering Circuit Analysis I	4
MATH-350	Financial Mathematics	4
PHYS-224	Electricity and Magnetism	3
PHYS-225	Electricity and Magnetism Laboratory	1
200-Level Liberal Arts Elective		4
	Credit Hours	**16**
Junior I		
IME-321	Operations Research - Deterministic Models	4
IME-332	Engineering Statistics	4
MECH-210	Statics	4
Concentration Elective Course		4
200-level Liberal Arts Elective		4
	Credit Hours	**20**
Junior II		
IME-200	Introduction to Industrial Engineering	4
IME-351	Engineering Economics	4
MECH-310	Dynamics	4
Concentration Elective Course		4
Advanced Humanities or Social Science Elective		4
	Credit Hours	**20**
Senior I		
IME-484	Engineering Ethics	4
Concentration Elective Course		4
Free Elective		4
Advanced Humanities or Social Science Elective		4
	Credit Hours	**16**
Senior II		
IME-452	Production System Design	4
LA-489	Senior Seminar: Leadership, Ethics, and Contemporary Issues	4
Concentration Elective Course		4
Concentration Elective Course		4
Math/Science Elective		4
	Credit Hours	**20**
Senior III		
IME-453	Supply Chain Design	4
Concentration Elective Course		4
Free Elective		4
ENGR-490	Senior Multidisciplinary Engineering Design Project	4
	Credit Hours	**16**
Any Term		
CILE-400 & CILE-401	Undergraduate Thesis Initiation and Undergraduate Thesis Completion	4
	Credit Hours	**4**
	Total Credit Hours	**161**