

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
or ECE-100	or Principles of Electrical and Computer Engineering	
IME-100	Interdisciplinary Design and Manufacturing	4
or ECE-100	or Principles of Electrical and Computer Engineering	
Credit Hours		17
Freshman II		
LA-201	Sophomore Seminar: Exploring the Human Condition	4
MATH-102	Calculus II	4
PHYS-114	Newtonian Mechanics	3
PHYS-115	Newtonian Mechanics Laboratory	1
IME-100	Interdisciplinary Design and Manufacturing	4
or ECE-100	or Principles of Electrical and Computer Engineering	
Credit Hours		16
Sophomore I		
ECON-201	Economic Principles	4
MATH-203	Multivariate Calculus	4
PHYS-224	Electricity and Magnetism	3
PHYS-225	Electricity and Magnetism Laboratory	1
ECE-101	MATLAB and C Programming	4
Credit Hours		16

Sophomore II		
MECH-210	Statics	4
EE-210	Circuits I	3
EE-211	Circuits I Lab	1
IME-200	Introduction to Industrial Engineering	4
MATH-258	Probability and Statistics	4
Credit Hours		16
Junior I		
MECH-310	Dynamics	4
IME-321	Operations Research - Deterministic Models	4
IME-332	Engineering Statistics	4
CONCENTRATION ELECTIVE COURSE		4
Advanced Humanities or Social Science Elective		4
Credit Hours		20
Junior II		
IME-351	Engineering Economics	4
MATH-350	Financial Mathematics	4
IME-452	Production System Design	4
CONCENTRATION ELECTIVE COURSE		4
Advanced Humanities or Social Science Elective		4
Credit Hours		20
Senior I		
IME-453	Supply Chain Design	4
IME-564	Ethics and Practice of Engineering	4
CONCENTRATION ELECTIVE COURSE		4
Advanced Humanities or Social Science Elective		4
Free Elective		4
Credit Hours		20
Senior II		
CONCENTRATION ELECTIVE COURSE		4
CONCENTRATION ELECTIVE COURSE		4
Math/Science Elective		4
LA-489	Sr. Seminar: Leadership, Ethics	4
Credit Hours		16
Senior III		
CONCENTRATION ELECTIVE COURSE		4
Advanced Humanities or Social Science Elective		4
Free Elective		4
ENGR-490	Senior Multidisciplinary Engineering Design Project	4
Credit Hours		16
Any Term		
CILE-400	Undergraduate Thesis Initiation	4
& CILE-401	and Undergraduate Thesis Completion	
Credit Hours		4
Total Credit Hours		161