

BS in Engineering Management

Program Codes:

20FQ1217BS

Degree Requirements

To earn a Bachelor of Science in Engineering Management degree from UIC, students need to complete university, college, and department degree requirements. The Department of Mechanical and Industrial Engineering degree requirements are outlined below. Students should consult the [College of Engineering](#) section for additional degree requirements and college academic policies.

Code	Title	Hours
Summary of Requirements		
Nonengineering and General Education Requirements		74
Required in the College of Engineering		52
Elective outside the Major Rubric		2
Total Hours		128

Nonengineering and General Education Requirements

Code	Title	Hours
Required Courses		
ENGL 160	Academic Writing I: Writing in Academic and Public Contexts	3
ENGL 161	Academic Writing II: Writing for Inquiry and Research	3
Understanding the Past course ^a		3
Understanding the Creative Arts course ^a		3
Exploring World Cultures course ^a		3
MATH 180	Calculus I ^b	4
MATH 181	Calculus II ^b	4
MATH 210	Calculus III ^b	3
MATH 218	Applied Linear Algebra	3
CHEM 122	Matter and Energy ^e	3
CHEM 123	Foundations of Chemical Inquiry I ^{b,e}	2
PHYS 141	General Physics I (Mechanics) ^b	4
PHYS 142	General Physics II (Electricity and Magnetism) ^b	4
ACTG 210	Introduction to Financial Accounting	3
ACTG 211	Introduction to Managerial Accounting	3
ECON 120	Principles of Microeconomics ^{c,d}	4
ECON 121	Principles of Macroeconomics ^{c,d}	4
FIN 300	Introduction to Finance	3
MGMT 340	Introduction to Organizations	3
MGMT 350	Business and Its External Environment	3
MKTG 360	Introduction to Marketing	3
MGMT 495	Competitive Strategy	4
STAT 362	Elements of Statistical Computing	2
Total Hours		74

- a Students should consult the [General Education](#) section of the catalog for a list of approved courses in this category.
- b This course is approved for the Analyzing the Natural World General Education category.
- c This course is approved for the Understanding the Individual and Society General Education category.
- d This course is approved for the Understanding U.S. Society General Education category.
- e General Education credit is given for successful completion of both CHEM 122 and CHEM 123.

Required in the College of Engineering

Code	Title	Hours
Required Courses		
ENGR 100	Engineering Success Seminar for Freshmen ^a	1
or ENGR 101	Engineering Success Seminar for Transfer Students	
CME 201	Statics	3
CME 203	Strength of Materials	3
CS 109	Programming for Engineers with MatLab	3
IE 201	Financial Engineering	3
IE 342	Probability and Statistics for Engineers	3
IE 345	Regression Applications and Forecasting in Engineering	3
IE 365	Work Productivity Analysis	4
IE 380	Materials and Manufacturing Process Principles	3
IE 442	Design and Analysis of Experiments in Engineering	3
IE 446	Advanced Quality Control and Reliability	3
IE 461	Safety Engineering	3
IE 463	Manufacturing Facilities Design and Material Handling	3
IE 466	Production Operation Analytics and Inventory Control	3
IE 467	Discrete Event Computer Simulation Application	3
IE 471	Operations Research I	3
IE 472	Operations Research II	3
IE 473	Stochastic Processes and Queuing Models	3
IE 499	Professional Development Seminar	0
Total Hours		52

- a ENGR 100 and ENGR 101 are a one-semester-hour courses, but the hour does not count toward the total hours required for graduation.

Elective outside the Major Rubric

Code	Title	Hours
Electives		
Elective outside the IE Rubric and College of Business Administration		2
Total Hours		2

Sample Course Schedule— Engineering Management

Course	Title	Hours
Freshman Year		
First Semester		
MATH 180	Calculus I	4
CHEM 122	Matter and Energy	3
CHEM 123	Foundations of Chemical Inquiry I	2
ENGL 160	Academic Writing I: Writing in Academic and Public Contexts	3
ECON 120	Principles of Microeconomics	4
ENGR 100	Engineering Success Seminar for Freshmen ^a	1
Hours		16
Second Semester		
MATH 181	Calculus II	4
PHYS 141	General Physics I (Mechanics)	4
ENGL 161	Academic Writing II: Writing for Inquiry and Research	3
ECON 121	Principles of Macroeconomics	4
Hours		15
Sophomore Year		
First Semester		
MATH 210	Calculus III	3
PHYS 142	General Physics II (Electricity and Magnetism)	4
IE 201	Financial Engineering	3
ACTG 210	Introduction to Financial Accounting	3
CS 109	Programming for Engineers with MatLab	3
Hours		16
Second Semester		
ACTG 211	Introduction to Managerial Accounting	3
CME 201	Statics	3
IE 342	Probability and Statistics for Engineers	3
MGMT 340	Introduction to Organizations	3
MKTG 360	Introduction to Marketing	3
Hours		15
Junior Year		
First Semester		
MATH 218	Applied Linear Algebra	3
IE 345	Regression Applications and Forecasting in Engineering	3
IE 365	Work Productivity Analysis	4
CME 203	Strength of Materials	3
General Education Core course		3
Hours		16
Second Semester		
IE 380	Materials and Manufacturing Process Principles	3
IE 442	Design and Analysis of Experiments in Engineering	3
IE 446	Advanced Quality Control and Reliability	3
FIN 300	Introduction to Finance	3
STAT 362	Elements of Statistical Computing	2
General Education Core course		3
Hours		17

Senior Year

First Semester		
IE 461	Safety Engineering	3
IE 467	Discrete Event Computer Simulation Application	3
IE 471	Operations Research I	3
IE 473	Stochastic Processes and Queuing Models	3
MGMT 350	Business and Its External Environment	3
General Education Core course		3
Hours		18
Second Semester		
MGMT 495	Competitive Strategy	4
IE 463	Manufacturing Facilities Design and Material Handling	3
IE 466	Production Operation Analytics and Inventory Control	3
IE 472	Operations Research II	3
IE 499	Professional Development Seminar	0
Elective outside Major Rubric		2
Hours		15
Total Hours		128

a *ENGR 100* is one-semester-hour course, but the hour does not count toward the total hours required for graduation. Students who transfer into the College of Engineering will take ENGR 101 within the first semester after enrolling.