

# 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.

### Summary of Requirements

Nonengineering and General Education Requirements	74
Required in the College of Engineering	52
Elective outside the Major Rubric	2
<b>Total Hours</b>	<b>128</b>

## Nonengineering and General Education Requirements

### 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 <sup>a</sup>	3
	Understanding the Creative Arts course <sup>a</sup>	3
	Exploring World Cultures course <sup>a</sup>	3
MATH 180	Calculus I <sup>b</sup>	4
MATH 181	Calculus II <sup>b</sup>	4
MATH 210	Calculus III <sup>b</sup>	3
MATH 310	Applied Linear Algebra	3
CHEM 122	General Chemistry I Lecture <sup>e</sup>	4
CHEM 123	General Chemistry Laboratory I <sup>b,e</sup>	1
PHYS 141	General Physics I (Mechanics) <sup>b</sup>	4
PHYS 142	General Physics II (Electricity and Magnetism) <sup>b</sup>	4
ACTG 210	Introduction to Financial Accounting	3
ACTG 211	Introduction to Managerial Accounting	3
ECON 120	Principles of Microeconomics <sup>c,d</sup>	4
ECON 121	Principles of Macroeconomics <sup>c,d</sup>	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
<b>Total Hours</b>		<b>74</b>

- <sup>a</sup> Students should consult the General Education (<http://catalog.uic.edu/ucat/degree-programs/general-education>) section of the catalog for a list of approved courses in this category.
- <sup>b</sup> This course is approved for the Analyzing the Natural World General Education category.
- <sup>c</sup> This course is approved for the Understanding the Individual and Society General Education category.
- <sup>d</sup> This course is approved for the Understanding U.S. Society General Education category.
- <sup>e</sup> General Education credit is given for successful completion of both CHEM 122 and CHEM 123.

## Required in the College of Engineering

### Required Courses

ENGR 100	Engineering Orientation <sup>a</sup>	1
CME 201	Statics	3
CME 203	Strength of Materials	3
CS 109	C/C ++ 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	Manufacturing Process Principles	3
IE 442	Design and Analysis of Experiments in Engineering	3
IE 446	Quality Control and Reliability	3
IE 461	Safety Engineering	3
IE 463	Plant Layout and Materials Handling	3
IE 466	Production Planning 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
<b>Total Hours</b>		<b>52</b>

- <sup>a</sup> ENGR 100 is a one-semester-hour course, but the hour does not count toward the total hours required for graduation.

## Elective outside the Major Rubric

### Electives

Elective outside the IE Rubric and College of Business Administration	2
<b>Total Hours</b>	<b>2</b>

## Sample Course Schedule— Engineering Management

Course	Title	Hours
<b>Freshman Year</b>		
<b>First Semester</b>		
MATH 180	Calculus I	4

CHEM 122	General Chemistry I Lecture	4
CHEM 123	General Chemistry Laboratory I	1
ENGL 160	Academic Writing I: Writing in Academic and Public Contexts	3
ECON 120	Principles of Microeconomics	4
ENGR 100	Engineering Orientation <sup>a</sup>	1

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**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

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**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	C/C ++ Programming for Engineers with MatLab	3

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**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

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**Hours** **15**

**Junior Year****First Semester**

MATH 310	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

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**Hours** **16**

**Second Semester**

IE 380	Manufacturing Process Principles	3
IE 442	Design and Analysis of Experiments in Engineering	3
IE 446	Quality Control and Reliability	3
FIN 300	Introduction to Finance	3
STAT 362	Elements of Statistical Computing	2
General Education Core course		3

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**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

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**Hours** **18**

**Second Semester**

MGMT 495	Competitive Strategy	4
IE 463	Plant Layout and Materials Handling	3
IE 466	Production Planning and Inventory Control	3
IE 472	Operations Research II	3
IE 499	Professional Development Seminar	0
Elective outside Major Rubric		2

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**Hours** **15**

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**Total Hours** **128**

<sup>a</sup> ENGR 100 is one-semester- hour course, but the hour does not count toward the total hours required for graduation.