

INDUSTRIAL ENGINEERING AND MANAGEMENT, BSIE

Requirements for Students Matriculating in or before Academic Year 2018-2019. Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

Minimum Overall Grade Point Average: 2.00

Total Hours: 123

Code	Title	Hours
General Education Requirements		
All General Education coursework requirements are satisfied upon completion of this degree plan		
<i>English Composition</i>		
ENGL 1113	Composition I ^{1, 2}	3
or ENGL 1313	Critical Analysis and Writing I	
ENGL 3323	Technical Writing	3
<i>American History & Government</i>		
Select one of the following:		
HIST 1103	Survey of American History	
HIST 1483	American History to 1865	
HIST 1493	American History Since 1865	
POLS 1113	American Government	3
<i>Analytical & Quantitative Thought (A)</i>		
MATH 2144	Calculus I (A) ²	4
MATH 2153	Calculus II (A) ²	3
MATH 2163	Calculus III ²	3
or MATH 2233	Differential Equations	
<i>Humanities (H)</i>		
Courses designated (H)		
6		
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course		
CHEM 1414	General Chemistry for Engineers (LN) ²	4
PHYS 2014	University Physics I (LN) ²	4
<i>Social & Behavioral Sciences (S)</i>		
SPCH 2713	Introduction to Speech Communication (S)	3
Select 3 hours of any course designated (S)		
3		
Hours Subtotal		42
Diversity (D) & International Dimension (I)		
May be completed in any part of the degree plan		
Select at least one Diversity (D) course		
Select at least one International Dimension (I) course		
College/Departmental Requirements		
<i>Basic Science</i>		
PHYS 2114	University Physics II (LN) ²	4
<i>Engineering</i>		
ENGR 1111	Introduction to Engineering ²	1
ENGR 1322	Engineering Design with CAD ²	2
or ENGR 1332	Engineering Design with CAD for MAE	
ENGR 1412	Introductory Engineering Computer Programming ²	2

Engineering Science

ENSC 2113	Statics ²	3
Select two of the following:		6
ENSC 2123	Elementary Dynamics	
ENSC 2143	Strength of Materials	
ENSC 2213	Thermodynamics	
ENSC 2613	Introduction to Electrical Science	
ENSC 3213	Computer Based Systems in Engineering	
ENSC 3233	Fluid Mechanics	

Industrial Engineering & Management

IEM 2903	Introduction to Manufacturing and Service Systems ²	3
IEM 3103	Probability and Statistics for Engineers I ²	3
IEM 3703	Probability and Statistics for Engineers II ²	3
Hours Subtotal		27

Major Requirements

<i>Mathematics</i>		
MATH 3013	Linear Algebra	3
<i>Engineering Science</i>		
ENSC 3313	Materials Science	3
Select 3 hours of the following:		3
ENSC 2123	Elementary Dynamics	
ENSC 2143	Strength of Materials	
ENSC 2213	Thermodynamics	
ENSC 2613	Introduction to Electrical Science	
ENSC 3213	Computer Based Systems in Engineering	
ENSC 3233	Fluid Mechanics	
<i>Industrial Engineering & Management</i>		
IEM 3303	Manufacturing Processes	3
IEM 3403	Collaborative Engineering Project Management	3
IEM 3503	Engineering Economic Analysis	3
IEM 3523	Engineering Cost Information and Control Systems	3
IEM 3813	Work Design, Ergonomics, and Human Performance	3
IEM 4013	Operations Research	3
IEM 4103	Quality Control	3
IEM 4113	Industrial Experimentation	3
IEM 4203	Facilities and Material Handling System Design	3
IEM 4413	Industrial Organization Management	3
IEM 4613	Production Planning and Control Systems	3
IEM 4713	Systems Simulation Modeling	3
IEM 4723	Information Systems Design and Development	3
IEM 4913	Senior Design Projects	3
Select 3 hours of the following:		3
IEM 4163	Service Systems and Processes	
IEM 4623	Supply Chain Management	
IEM 4953	Industrial Assessment and Improvement	
IEM 4990	Selected Topics in Industrial Engineering and Management (3)	

Hours Subtotal	54
Total Hours	123

- ¹ If a "B" or higher is not earned in ENGL 1113 Composition I, ENGL 1213 Composition II or ENGL 1413 Critical Analysis and Writing II is also required (per Academic Regulation 3.5 (<http://catalog.okstate.edu/university-academic-regulations>)).
- ² Courses that must be completed prior to admission to professional school.

Other Requirements

Admission to Professional School (required)

Refer to the OSU Catalog corresponding to your matriculation date for detailed admissions requirements.

Graduation Requirements

- A minimum GPA of 2.00 is required in all courses applied to Professional School coursework.
- A 'C' or better is required in each course that is a prerequisite for an IEM course and in technical courses listed, whether taken prior to admission to Professional School or not.
- The major engineering design experience is satisfied by IEM 4913 Senior Design Projects.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2024.