

Industrial Engineering Major Courses (36 credits)
Required IE Courses (36 credits)

- _____ (0) IE 20000 - Industrial Engineering Seminar
- _____ (3) IE 23000 - Probability and Statistics in Engineering I
- _____ (3) IE 34300 - Engineering Economics
- _____ (3) IE 33000 - Probability and Statistics in Engineering II
- _____ (3) IE 33200 - Computing in Industrial Engineering
- _____ (3) IE 33500 - Operation Research- Optimization
- _____ (3) IE 33600 - Operations Research- Stochastic Models
- _____ (3) IE 37000 - Manufacturing Processes I
- _____ (3) IE 38300 - Integrated Production System I
- _____ (3) IE 38600 - Work Analysis and Design I
- _____ (3) IE 43100 - Industrial Engineering Design
- _____ (3) IE 47400 - Industrial Control System
- _____ (3) IE 48600 - Work Analysis and Design II

IE Technical Electives - (15 credits-NOTE: 6 credits required in IE courses, Must do two of the first three options listed below)

(<https://engineering.purdue.edu/IE//Academics/IEUndergrad/Technical%20Elective%20Program>)

- _____ (3) IE 47000 - Manufacturing Process II, or IE 48400 - Integrated Production Systems II
- _____ (3) IE 5XX00, or IE 47000, or IE 48400
- _____ (3) Technical Elective I
- _____ (3) Technical Elective II
- _____ (3) Technical Elective III

Other Departmental/Program Course Requirements (55-57 credits)
Mathematics Requirements (18-20 cr.)

- _____ (4/5) MA 16500/16100 - Calculus I (satisfies FYE requirement)*
- _____ (4/5) MA 16600/16200 - Calculus II (satisfies FYE requirement)*
- _____ (4) MA 26100 - Calculus III*
- _____ (3) MA 26500 - Linear Algebra*
- _____ (3) MA 26600 - Ordinary Differential Equations*

Science Requirements (14 cr.)

- _____ (4) PHYS 17200 - Physics I (satisfies FYE requirement)*
- _____ (3) PHYS 24100 - Electricity and Optics*
- _____ (4) CHM 11500 - General Chemistry I (satisfies FYE requirement)*
- _____ (3) CS 15900 - Programming Applications for Engineers (satisfies FYE requirement)

General Engineering/Engineering Science Requirements (16 cr.)

- _____ (2) ENGR 13100 - Transforming Ideas to Innovation I (satisfies FYE requirement)
- _____ (2) ENGR 13200 - Transforming Ideas to Innovation II (satisfies FYE requirement)
- _____ (3) ME 27000 - Basic Mechanics I
- _____ (3) ME 20000 - Thermodynamics I
- _____ (3) NUCL 27300 - Mechanics of Materials
- _____ (3) ECE 20100 - Linear Circuit Analysis I

General Education Elective Requirements (24 cr.)

Foundational Core (<http://www.purdue.edu/provost/initiatives/curriculum/course.html>)

- _____ (3) _____ (satisfies Information Literacy selective for core; ENGL 10600/10800 strongly recommended)
- _____ (3) _____ (satisfies Written Communication selective for core; ENGL 10600/10800 strongly recommended)
- _____ (3) _____ (satisfies Oral Communication selective for core; COM 11400 strongly recommended)
- _____ (3) _____ (satisfies Human Cultures: Humanities selective for core)
- _____ (3) _____ (satisfies Human Cultures: Behavioral/Social Science selective for core)
- _____ (3) _____ (satisfies Science, Technology & Society selective for core)

IE General Education Electives

(<https://engineering.purdue.edu/IE/Academics/Undergrad/General%20Education%20Elective%20Program%20Overview>)

- _____ () _____
- _____ () _____
- _____ () _____

University Core Requirements

Human Cultures Humanities



Science, Technology & Society



Human Cultures Behavioral/Social Science	<input type="checkbox"/>	
Information Literacy	<input type="checkbox"/>	
Science Selective	<input type="checkbox"/>	PHYS 17200
Science Selective	<input type="checkbox"/>	CHM 11500

Selective Written Communication	<input type="checkbox"/>	
Oral Communication	<input type="checkbox"/>	
Quantitative Reasoning	<input type="checkbox"/>	MA 16100/16500

Suggested Arrangement of Courses:

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
4	MA 16500		4	MA 16600	MA 16500
4	CHM 11500		4	PHYS 17200	
4	General Education Elective I		3	CS 15900	
2	ENGR 13100		2	ENGR 13200	ENGR 13100
			3	General Education Elective II	
14			16		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	IE 23000	MA 26100 co-req	3	IE 33000	IE 23000/ ENGR 13100
3	General Elective III		3	MA 26500	MA 16200/16600, MA 26100 co-req
4	MA 26100	MA 16600/ 162	3	NUCL 27300	ME 27000
3	IE 34300	MA 16200, ENGR 13100	3	PHYS 24100	PHYS 17200, MA 16200/16600 co-req
3	ME 27000	PHYS 17200, ENGR 13200, MA 16200/16600	3	General Elective IV	
0	IE 20000				
16			15		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
3	ECE 20100	ENGR 13100, PHYS 17200, MA 16600/16200	3	IE 33600	IE 23000, MA 26500, (MA 26600, IE 33200 co-req)
3	IE 33200	CS 15900, IE 33000	3	IE 38300	IE 33500
3	IE 33500	MA 26500	3	IE 38600	IE Major
3	IE 37000	NUCL 27300	3	ME 20000	CHM 11500, (MA 26100, ENGR 13200 co-req)
3	MA 26600	MA 26100	3	General Elective VI	
3	General Elective V				
18			15		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	IE 47400	CS 15900, ME 27000, ECE 20100, MA 26600, MA 26500	3	IE 43100	IE -34300, 33200, 38600, 336, 38300, 37000
3	IE 48600	IE 38600	3	Technical Elective III	
3	Technical Elective I		3	Technical Elective IV	
3	Technical Elective II		3	Technical Elective V	
3	General Elective VII		3	General Elective VIII	
15			15		

*Satisfies a University Core Requirement **Satisfies a Non-departmental Major Course Requirement

123 semester credits required for Bachelor of Engineering degree.

2.0 Graduation GPA required for Bachelor of Engineering degree.

The student is ultimately responsible for knowing and completing all degree requirements.