

Departmental/Program Major Courses (59 credits)

Required Major Courses (38 credits)

D- or better required in all major courses

- _____ (3) MET 10200 – Production Design and Specifications
- _____ (3) MET 11100 – Applied Statics
- _____ (1) MET 11300 – Mechanics Applications
- _____ (3) ¹Materials and Processes Selective
- _____ (3) MET 23000 – Fluid Power
- _____ (3) MET 24500 – Manufacturing Systems
- _____ (3) MET 28400 – Introduction to Industrial Controls
- _____ (3) MFET 24800 – Introduction to Robotics
- _____ (3) MFET 34400 – Automated Manufacturing Processes
- _____ (3) MFET 37400 – Manufacturing Integration I
- _____ (3) CNIT 10500 – Introduction to C Programming
- _____ (3) ENGT 18000 – Engineering Technology Foundations
- _____ (1) ENGT 18100 – Engineering Technology Applications
- _____ (3) ²Manufacturing Selective

ROET Courses (21 credits, included in departmental/program major courses total)

- _____ (3) ³Mechatronics/Controls Selective
- _____ (3) ⁴Manufacturing/Controls Selective
- _____ (3) ECET 32700 – Instrumentation and Data Acquisition Design
- _____ (3) ECET 33700 – Continuous Systems Analysis and Design
- _____ (3) ⁵Capstone Selective I
- _____ (3) ⁶Capstone Selective II
- _____ (3) MFET 34800 – Advanced Industrial Robotics

Other Departmental/Program Course Requirements (57 credits)

- _____ (3) ⁷Freshman Speech Selective (choose from COM 11400, **SCLA 10200**) (*satisfies Oral Communication for core*)
- _____ (3) ⁸Communications Selective (Choose from COM 31500, **COM 32000**, COM 41500, EDPS 31500)
- _____ (3) ⁹Technical Writing Selective (choose from **ENGL 42100**, ENGL 42400)
- _____ (3) IET 33400 – Economic Analysis for Technology Systems or IET 45100 Monetary Analysis for Industrial Decisions
- _____ (3) MA 16010 – Applied Calculus I (*satisfies Quantitative Reasoning for core*)
- _____ (3) MA 16020 – Applied Calculus II
- _____ (3) ECET 22400 – Electronic Systems
- _____ (3) ECET 38001 – Global Professional Issues in Engineering
- _____ (3) CHM 11100 – General Chemistry (*satisfies Science for core*)
- _____ (4) ¹⁰Physics Selective (choose from PHYS 21800, **PHYS 22000**, PHYS 17200) (*satisfies Science for core*)
- _____ (3) TECH 12000 – Design Thinking in Technology (*satisfies Information Literacy and Science, Technology & Society for core*)
- _____ (3) ¹¹Science Selective
- _____ (3) ¹²Freshman Composition Selective (choose from ENGL 10600, ENGL 10800, **SCLA 10100**) (*satisfies Written Comm for core*)
- _____ (3) ¹³Human Cultures: Humanities Foundation Selective (*satisfies Human Cultures: Humanities for core*)
- _____ (3) ¹⁴Human Cultures: Behavior/Social Sciences Foundation Selective (*satisfies Human Cultures: Behavioral Sciences for core*)
- _____ (3) ¹⁵Humanities/Social Science Elective (200-level or higher)
- _____ (2) ¹⁶Computer Graphics Technology Selective (choose from **CGT 11000**, **CGT 16300**, or ENGT 10500)
- _____ (3) ¹⁷Statistics/Quality Selective (choose between **STAT 30100** or **IET 31600**)
- _____ (3) ¹⁸Technical Selective
- _____ (0) ¹⁹Professional Requirement
- _____ (0) ²⁰Intercultural Requirement

Free Electives (4 credits)

- _____ (4) ²¹Free Elective (Apply excess Physics II credit here.)

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

Human Cultures: Behavioral/Social Sciences	<input type="checkbox"/>	_____	Science	<input type="checkbox"/>	_____
Human Cultures: Humanities	<input type="checkbox"/>	_____	Science	<input type="checkbox"/>	_____
Information Literacy	<input type="checkbox"/>	_____	Science, Technology & Society	<input type="checkbox"/>	_____
Oral Communication	<input type="checkbox"/>	_____	Written Communication	<input type="checkbox"/>	_____
Quantitative Reasoning	<input type="checkbox"/>	_____			

The student is ultimately responsible for knowing and completing all degree requirements.
myPurduePlan is the knowledge source for specific requirements and completion.

Fall 1 st Year	CR	GR	Fulfilled by	Spring 1 st Year	CR	GR	Fulfilled by
ENGT 18000 ENG Tech Foundations (Pre-req: ALEKS 60, SAT 570, ACT 24, or MA 15300 or higher)	3			MA 16010 Applied Calculus I * (Pre-req: ALEKS score of 75)	3		
ENGT 18100 ENG Tech Applications (pre or concurrent with ENGT 18000)	1						
MET 14400 Materials and Processes II [¹ Materials and Processes Selective]	3			MET 11100 Applied Statics (Pre-req: ENGT 18000)	3		
CGT 16300 Graph Comm. & Spat Anlys. [¹⁶ Computer Graphics Tech Selective]	2			MET 10200 Production Design & Specs (Pre-reqs: CGT Selective and ENGT 18000)	3		
TECH 12000 Design Thinking in Tech.*	3			CNIT 10500 Introduction to C Programming	3		
SCLA 10100 Transformative Texts, Critical Thinking & Communication I [¹² Freshman Composition Selective*]	3			SCLA 10200 Transformative Texts, Critical Thinking & Communication II [⁷ Freshman Speech Selective*]	3		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	15		

Fall 2 nd Year	CR	GR	Fulfilled by	Spring 2 nd Year	CR	GR	Fulfilled by
MET 11300 Mechanics Applications (Pre-req: MET 11100)	1			MET 23000 Fluid Power [Pre-reqs: (MET 11100 or PHYS 22000) and MA 16010]	3		
MET 24500 Manufacturing Systems (Pre-reqs: (MET 14300 or MET 14400) & CGT Selective)	3			MFET 24800 Introduction to Robotics (Pre-req: CNIT 10500)	3		
ECET 22400 Electronic Systems (Pre-req: MA 16010)	3			MET 28400 Intro to Industrial Controls (Pre-req: ECET 22400)	3		
PHYS 22000 General Physics I [¹⁰ Physics Selective*]	4			PHYS 22100 General Physics II [¹¹ Science Selective*]	3		
MA 16020 Applied Calculus II (Pre-req: MA 16010 with a grade of C- or better)	3			[¹³ Humanities Foundation Selective*]	3		
[²¹ Free Elective] (Apply excess Physics II credit here)	1						
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	15		

Fall 3 rd Year	CR	GR	Fulfilled by	Spring 3 rd Year	CR	GR	Fulfilled by
MFET 34400 Automated Mfg. Processes (Pre-req: MET 24500)	3			MFET 37400 Manufacturing Integration I (Pre-req: MET 28400)	3		
ECET 33700 Cont. Syst. Anlys. & Design (Pre-req: ECET 22400 and MA 16020)	3			ECET 32700 Instrumentation & DAQ Design (Pre-reqs: ECET 22400, MA 16010, and PHYS 22000)	3		
IET 31600 Statistical Quality Control [¹⁷ Statistics or Quality Selective]	3			IET 31300 Tech Inn & Int: Bar Codes & Biomet [⁴ Manufacturing/Controls Selective]	3		
IET 33400 Economic Analysis for Technology Systems	3			[² Manufacturing Selective]	3		
CHM 11100 General Chemistry*	3			ECET 38001 Global Prof Issues in ET or TLI 35600 Global Technology Leadership	3		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	15		

Fall 4 th Year	CR	GR	Fulfilled by	Spring 4 th Year	CR	GR	Fulfilled by
ENGT 48000 ET Capstone I [⁵ Capstone Selective I]	3			ENGT 48100 ET Capstone II [⁶ Capstone Selective II] (Pre-req: Capstone Selective I)	3		
MFET 34800 Adv. Industrial Robots (Pre-reqs: MFET 24800 and ECET 33700)	3			[¹⁸ Technical Selective]	3		
MET 48200 Mechatronics [³ Mechatronics/Controls Selective]	3			[¹⁵ Humanities/Social Science Elective] (200-level or higher)	3		
ENGL 42100 Technical Writing (Pre-req: ENGL 10600/10800 or SCLA 10100) [⁹ Technical Writing Selective]	3			COM 32000 Small Group Communication [⁸ Communications Selective]	3		
[¹⁴ Behavioral/Social Science Selective]	3			[²¹ Free Elective]	3		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	15		

*Fulfills University core.

- 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
- Students must earn a "D-" or better in all courses.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Complete a ¹⁹Professional Requirement. Complete an ²⁰Intercultural Requirement.

The student is ultimately responsible for knowing and completing all degree requirements.
 myPurduePlan is knowledge source for specific requirements and completion.