

Fall 1 st Year	CR	GR	Fulfilled by	Spring 1 st Year	CR	GR	Fulfilled by
Materials and Processes Selective	3			MA 16010 Applied Calculus I * (Prereq: ALEKS score of 75)	3		
TECH 12000 Design Thinking in Tech.*	3			CNIT 10500 Introduction to C Programming	3		
Computer Graphics Selective	2			MET 11100 Applied Statics (Prereq: ENGT 18000)	3		
ENGT 18000 ENG Tech Foundations (Pre-req: ALEKS 60, SAT 570, ACT 24, or MA 15300 or higher)	3			Humanities Foundation Selective*	3		
ENGT 18100 ENG Tech Applications (pre or concurrent with ENGT 18000)	1			MET 10200 Production Specifications (Prereqs: CGT Selective and ENGT 18000)	3		
Freshman Composition 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
ECET 22400 Electronic Systems (Prereq: MA 16010)	3			MET 11300 Mechanics Applications (Prereq: MET 11100)	1		
Freshman Speech Selective* +	3			Free Elective	3		
MET 24500 Manufacturing Systems (Prereqs: (MET 14300 or MET 14400) and Computer graphics selective)	3			MET 28400 Intro to Industrial Controls (Prereq: ECET 22400)	3		
Physics Selective	4			MFET 24800 Introduction to Robotics (Prereq: CNIT 10500)	3		
MA 16020 Applied Calculus II (Prereq: MA 16010 with a grade of C- or better)	3			CHM 11100 General Chemistry *CHEM C101 Elementary Chemistry I or *CHEM C105 Principles of Chemistry I	3		
				Technical Elective	3		
TOTAL CREDIT HOURS	16			TOTAL CREDIT HOURS	16		

Fall 3 rd Year	CR	GR	Fulfilled by	Spring 3 rd Year	CR	GR	Fulfilled by
MFET 34400 Automated Mfg Processes (Prereq: MET 24500)	3			MFET 37400 Mfg Integration I (Prereq: MET 28400)	3		
Behavioral/Social Science Selective*	3			ECET 32700 Instrument & DAQ Design (Prereqs: ECET 22400, MA 16010, PHYS 22000)	3		
ECET 33700 Analog Signal Processing (Prereq: ECET 22400 + MA 16020)	3			MET 23000 Fluid Power (Prereqs: (MET 11100 or PHYS 22000) and MA 16010)	3		
Communications Selective +	3			Manufacturing Selective	3		
Statistics or Quality Selective	3			Humanities/Social Science Elective	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
Capstone Selective I	3			Capstone Selective II (Prereq: Capstone Selective I)	3		
MFET 34800 Ind Robots/Motion Ctrl (Prereq: MFET 24800 + ECET 33700)	3			ECET 38001 Global Prof Issues in ET TLI 35600 Global Technology Leadership	3		
Technical Writing Selective +	3			Science Selective	3		
Mechatronics/Controls Selective	3			Manufacturing/Controls Selective	3		
IET 45100 Monetary Analysis for industrial Decisions or IET 33400 Economic Analysis for Technology Systems	3			Free Elective	1		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	13		

*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 Professional Requirement. ☐ Complete an Intercultural Requirement. ☐

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

myPurduePlan is knowledge source for specific requirements and completion.

***** Updated 6/8/2020

Polytechnic Columbus
2020-2021 ROBOTICS ENGINEERING TECHNOLOGY SUPPLEMENTAL INFORMATION
All prerequisites must be met.

FRESHMAN COMPOSITION SELECTIVE+

ENGL 10600 First-Year Composition
ENGL 10800 Accelerated First-Year Composition

SCLA 10100 Transformative Text, Critical Thinking and
Communication I: Antiquity to Modernity

FRESHMAN SPEECH SELECTIVE+

COM 11400 Fundamentals Of Speech Communication

SCLA 10200 Transformative Texts, Critical Thinking And
Communication II: Modern World

COMMUNICATIONS SELECTIVE+

COM 31500 Speech Communication Of Technical Information
COM 32000 Small Group Communication

COM 41500 Discussion Of Technical Problems
EDPS 31500 Collaborative Leadership: Interpersonal Skills

MATERIALS & PROCESSES SELECTIVE

MET 14300 Materials & Processes I

MET 14400 Materials & Processes II

TECHNICAL WRITING SELECTIVE+

ENGL 42100 Technical Writing

ENGL 42400 Writing For High Technology Industries

COMPUTER GRAPHICS SELECTIVE

CGT 11000 Technical Graphics Communications
CGT 16300 Graphical Communications and Spatial Analysis

ENGT 10500 Intro to Engineering Design

TECHNICAL SELECTIVE

- any 3xxxx or higher ECET course which is not currently required on the plan of study.

CGT 11301 Product Data Management
CGT 20301 Model Based Definition
CGT 21301 Simulation And Visualization Applications
CGT 30301 Digital Manufacturing
CGT 31301 The Business Of Managing Digital Product Data
ECET 27900 Embedded Digital Systems
FNR 30110 Sustainable Forest Products Manufacturing
IET 31300 Tech Integration: Bar Codes to Biometrics
IET 33100 Advanced Industrial Safety And Health Management
IET 33620 Total Productive Maintenance
IET 44275 Global Transportation And Logistics Management

MET 30200 CAD In The Enterprise
MET 33400 Advanced Fluid Power
MET 34600 Advanced Materials In Manufacturing
MET 38200 Controls and Instrumentation for Automation
MET 43200 Hydraulic Motion Control Systems
MET 43600 Pneumatic Motion Control Systems
MFET 28800 Smart Manufacturing Operational And Information
Networks
MGMT 45500 Legal Background For Business I
OLS 28400 Leadership Principles

STATISTICS OR QUALITY SELECTIVE

STAT 30100 Elementary Statistical Methods

IET 31600 Statistical Quality Control

PHYSICS SELECTIVE

PHYS 22000 General Physics

PHYS 17200 Modern Mechanics

SCIENCE SELECTIVE

BIOL 11000 Fundamentals of Biology I
BIOL 20300 Human Anatomy and Physiology
CHM 11200 General Chemistry II

CHM 11600 General Chemistry
PHYS 22100 General Physics
PHYS 24100 Electricity and Optics

MECHATRONICS SELECTIVE

MET 43200 Hydraulic Motion Control Systems
MET 43600 Pneumatic Motion Control Systems
MET 48200 Mechatronics
MET 58100 Design for Mechatronics

MFET 29200 Projects in Automation, Robotics, and Mechatronics
MFET 34800 Advanced Industrial Robotics
MFET 39200 Advanced Projects in Automation, Robotics, and
Mechatronics

CONTROLS SELECTIVE

ECET 27400 Wireless Communications
ECET 35901 Computer Based Data Acquisition Applications
ECET 36900 Applied Computer Vision Sensing & Automation
IET 31300 Tech Integration: Bar Codes to Biometrics
MET 33400 Advanced Fluid Power
MET 38200 Controls and Instrumentation for Automation
MET 43200 Hydraulic Motion Control Systems

MANUFACTURING SELECTIVE

AT 27200 Introduction To Composite Technology
AT 30802 Aircraft Materials Processes
AT 47200 Advanced Composite Technology
CGT 20301 Model Based Definition
CGT 21301 Simulation And Visualization Applications
CGT 30301 Digital Manufacturing
CGT 31301 The Business Of Managing Digital Product Data
ECET 27000 Electronics Prototype Development And Construction
ECET 36900 Applied Computer Vision Sensing & Automation
IET 33620 Total Productive Maintenance

CAPSTONE SELECTIVE I

ENGT 48000 ET Capstone I
ECET 43000 Electrical and Electronic Product and Program Management
ECET 43100 International Capstone Project Planning and Design

CAPSTONE SELECTIVE II

ENGT 48100 ET Capstone II
ECET 46000 Project Design and Development
ECET 46100 International Capstone Project Execution
ENGT 40600 Entrepreneurial Capstone II

MET 43600 Pneumatic Motion Control Systems
MET 48200 Mechatronics
MFET 29200 Projects in Automation, Robotics, and Mechatronics
MFET 39200 Advanced Projects in Automation, Robotics, and Mechatronics
TLI 31300 Tech Integration: Bar Codes to Biometrics

IET 44275 Global Transportation And Logistics Management
MET 30200 CAD In The Enterprise
MET 34900 Stringed Instrument Design and Manufacture
MET 45100 Manufacturing Quality Systems
MFET 29200 Projects in Automation, Robotics, and Mechatronics
MFET 39200 Advanced Projects in Automation, Robotics, and Mechatronics
MFET 49900 (Technology, Innovation and Culture in Bavaria (Study Abroad))

ENGT 40500 Entrepreneurial Capstone I
MET 40100 Capstone Projects I
MFET 48000 Project Planning for Integration
ENGT 40500 Entrepreneurial Capstone I

MET 40200 Capstone Projects II
MFET 48100 Integration of Manufacturing Systems
ENGT 40600 Entrepreneurial Capstone II

HUMANITIES FOUNDATION SELECTIVE: see <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

BEHAVIORAL/SOCIAL SCIENCE FOUNDATION SELECTIVE: see <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

HUMANITIES/SOCIAL SCIENCE ELECTIVE:

Any 2xxxx or higher course in Psychology, Sociology, English Literature, History, Political Science, Philosophy, Religion, Anthropology, Economics, or a foreign language. Art history, art appreciation, music appreciation or theater appreciation are acceptable.

FREE ELECTIVE: Any non-remedial course

+ denotes optional course for Cornerstone Certificate.