

Fall 1 <sup>st</sup> Year	CR	GR	Fulfilled by	Spring 1 <sup>st</sup> Year	CR	GR	Fulfilled by
Computer Graphics Technology Selective (CGT 11000, CGT 16300, or ENGT 10500)	2			MA 16010 Applied Calculus II (Prereq: ALEKS Score 75)	3		
TECH 12000 Design Thinking in Tech.*	3			MET 11100 Applied Statics (Prereqs: ENGT 18000)	3		
MET 14300 Materials and Processes I	3			MET 14400 Materials and Processes II	3		
ENGT 18000 ENG Tech Foundations (Prereq: ALEKS 60, SAT 570, ACT 24, or MA 15300 or higher)	3			MET 10200 Production Design And Specifications (Prereqs: CGT selective and ENGT 18000)	3		
ENGT 18100 ENG Tech Applications (pre or concurrent with ENGT 18000)	1			Physics 22000 General Physics I*	4		
Freshman Composition Selective*	3						
<b>TOTAL CREDIT HOURS</b>	<b>15</b>			<b>TOTAL CREDIT HOURS</b>	<b>16</b>		

Fall 2 <sup>nd</sup> Year	CR	GR	Fulfilled by	Spring 2 <sup>nd</sup> Year	CR	GR	Fulfilled by
ECET 22400 Electronics Systems (Prereq: MA 16010)	3			MET 23000 Fluid Power (Prereqs: (MET 11100 or PHYS 22000) and MA 16010)	3		
MA 16020 Applied Calculus II (Prereq: MA 16010 with grade of C- or higher)	3			Programming Selective	3		
MET 21100 Applied Strength of Materials (Prereqs: MET 11100 and MA 16010)	4			PHYS 22100 General Physics II (Prereq: PHYS 22000)	4		
MET 21300 Dynamics (Prereqs: PHYS 22000, MA 16010, & ENGT 18000)	3			MET 28400 Intro to Industrial Controls (Prereq: ECET 22400)	3		
Humanities Selective	3			Freshman Speech Selective* +	3		
<b>TOTAL CREDIT HOURS</b>	<b>16</b>			<b>TOTAL CREDIT HOURS</b>	<b>16</b>		

Fall 3 <sup>rd</sup> Year	CR	GR	Fulfilled by	Spring 3 <sup>rd</sup> Year	CR	GR	Fulfilled by
CHM 11100 General Chemistry	3			MET 32000 Applied Thermodynamics (Prereqs: MA 16010 and MET 22000)	3		
MET 22000 Heat And Power (Prereqs: PHYS 22000, MA 16010 and ENGT 18000)	3			MET 34600 Advanced Materials in Mfg. (Prereqs: MET 21100, MET 24500 and CHM 11100)	3		
MET 24500 Manufacturing Systems (Prereqs: (MET 14300 or MET 14400) and CGT Selective)	3			STAT 30100 Elementary Statistical Methods	3		
Technical Writing Selective +	3			Economics/Finance Selective	3		
Technical/Management Selective	3			Global/Professional Selective	3		
<b>TOTAL CREDIT HOURS</b>	<b>15</b>			<b>TOTAL CREDIT HOURS</b>	<b>15</b>		

Fall 4 <sup>th</sup> Year	CR	GR	Fulfilled by	Spring 4 <sup>th</sup> Year	CR	GR	Fulfilled by
MET Capstone Selective I	3			MET Capstone Selective II (Prereqs: Capstone Selective I)	3		
IET 33400 Economic Analysis For Technology Systems	3			MET Elective or approved Focus Area Elective	3		
MET 31300 Applied Fluid Mechanics (Prereqs: MA 16020, MET 22000 and MET 23000)	3			Technical Selective or approved Focus Area Elective	3		
Mechanics Selective	3			Behavioral Social Science Selective	3		
Communications Selective +	3						
<b>TOTAL CREDIT HOURS</b>	<b>15</b>			<b>TOTAL CREDIT HOURS</b>	<b>12</b>		

Refer to the 2020 MET Supplemental Instruction form for optional courses to complete selectives and prerequisites.

- 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 unless otherwise noted.
- 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.

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

\*\*\*\*\* Updated 6/10/2020

Polytechnic South Bend

2020-2021 MET SUPPLEMENTAL INFORMATION--All prerequisites must be met.

**Bold indicates courses offered at the South Bend campus**

See Student Affairs Administrator for course availability

**CGT SELECTIVE**

**CGT 11000 Technical Graphics Communications**

CGT 16300 Graphical Communication and Spatial Analysis

ENGT 10500 Intro to Engineering Design

**FRESHMAN COMPOSITION**

ENGL 10600 First-Year Composition

ENGL 10800 Accelerated First-Year Composition

HONR 19903 Interdisciplinary Approaches in Writing

**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**

**ECONOMICS/FINANCE SELECTIVE**

AGEC 21700 Economics

CSR 34200 Personal Finance

**ECON 21000 Principles of Economics**

ECON 25100 Microeconomics

ECON 25200 Macroeconomics

ENTR 20000 Introduction to Entrepreneurship and Innovation

**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

**TECHNICAL WRITING SELECTIVE**

**ENGL 42100 Technical Writing**

ENGL 42400 Writing For High Technology Industries

**PROGRAMMING SELECTIVE**

**CNIT 10500 Introduction to C Programming**

CNIT 15500 Introduction to Object-Oriented Programming

CNIT 15501 Introduction to Software Development Concepts

CNIT 17500 Visual Programming

CS 15900 Programming Applications for Engineers

CS 17700 Programming with Multimedia Objects

CS 18000 Problem Solving and Object-Oriented Programming

MET 16400 Computing In Engineering Technology

**TECHNICAL SELECTIVE**

A 300-400 level ENGR, ECET, MFET, CS or elective IET course. (excluding MFET 30000)

A CHM, MA, PHYS or STAT course beyond what is required.

Any MET elective course

Purdue 3+-session co-op with completed seminar courses

ANSC 23000 Physiology of Domestic Animals

AT 27200 Introduction to Composite Technology

AT 27800 Nondestructive Testing For Aircraft

AT 47800 Advanced Nondestructive Testing

BCHM 22100 Analytical Biochemistry

BCM 23000 Mechanical and Electrical Systems

BCM 31500 Mechanical Construction Estimating

BCM 38000 Concrete Construction

BIOL 20300 Human Anatomy And Physiology

BIOL 22100 Introduction to Microbiology

CGT 11301 Product Data Management

CGT 30301 Digital Manufacturing

CE 35000 Introduction to Environmental and Ecological Engineering

CE 35500 Engineering Environmental Sustainability

HSCI 31200 Radiation Science Fundamentals

IE 57700 Human Factors In Engineering

MFET 28800 Smart Manufacturing Operational and Information Networks

NS 35000 Naval Ship Systems

IET 33100 Advanced Industrial Safety & Health Management

**MECHANICS SELECTIVE**

**MET 31100 Experimental Strength of Materials**

**MET 31400 Applications of Machine Elements**

MET 31500 Applied Mechanism Kinematics and Dynamics

**MET 31601 Mechanics of Machine Design**

MET 31700 Machine Diagnostics

**MET 41100 Introduction to the Finite Element Method**

**MANAGEMENT SELECTIVE**

AFT 35100 AF Leadership Studies I

AFT 36100 AF Leadership Studies II

**ECET 38001 Global Professional Issues in ET**

EDPS 31500 Collaborative Leadership: Interpersonal Skills

EDPS 31600 Collaborative Leadership: Cross-Cultural Settings

EDPS 31700 Collaborative Leadership: Mentoring

ENTR 31000 Marketing Management for New Ventures

ENTR 31500 Business Planning for Social Entrepreneurship

IET 41400 Financial Analysis for Technology Systems

MFET 35800 Smart Manufacturing and the Global Economy

**MGMT 20000 Introductory Accounting**

MGMT 20100 Management Accounting I

MGMT 21200 Business Accounting

MGMT 45500 Legal Background for Business

MSL 20200 Leadership &amp; Teamwork

**MET ELECTIVE**

5-session co-op with completed seminar courses

**MET 30200 CAD in the Enterprise****MET 31100 Experimental Strength of Materials****MET 31400 Applications of Machine Elements**

MET 31500 Applied Kinematics and Dynamics

**MET 31601 Mechanics of Machine Design**

MET 31700 Machine Diagnostics

MET 33400 Advanced Fluid Power

**MET 34900 Stringed Instrument Design and Manufacture****MET 38200 Controls and Instrumentation for Automation**

MET 40000 Mechanical Design

**MET 41100 Introduction to the Finite Element Method****MET CAPSTONE SELECTIVES I & II**

ENGT 40500 Entrepreneurial Capstone I

ENGT 40600 Entrepreneurial Capstone II

ENGT 48000 Engineering Technology Capstone I

ENGT 48100 Engineering Technology Senior Capstone II

MET 33400 Advanced Fluid Power

MET 40000 Mechanical Design

**GLOBAL/PROFESSIONAL SELECTIVE**

AFT 47100 National Security, Leadership, Commissioning Prep

AFT 48100 National Security Affairs &amp; Prep for Active Duty

ANTH 20500 Human Cultural Diversity

ANTH 34100 Culture &amp; Personality

ARAB 28000 Arabic Culture

CHNS 28000 Selected Topics on China

CHNS 28500 Chinese Calligraphy

**COM 22400 Communicating in the Global Workplace**

COM 30300 Intercultural Communication

**ECET 38001 Global Professional Issues in ET**

EDPS 31600 Leadership: Cross-Cultural

FNR 48800 Global Environmental issues

FR 33000 French Cinema

GER 23000 German Folklore &amp; Fairy Tales

GER 23000 German Literature in Translation

GER 28000 Beer Brewing in the German Culture

MSL 30100 Leadership &amp; Problem Solving

MSL 40100 Leadership &amp; Management

NS 21400 Fundamentals of Leadership

NS 41300 Naval Leadership Management &amp; Ethics

OLS 27400 Applied Leadership

OLS 28400 Leadership Principles

OLS 36400 Tech &amp; the Organization

OLS 38600 Leadership for Org Change &amp; Innov

PSY 27200 Intro to Industrial-Organizational Psych

**TLI 11200 Foundations of Organizational Leadership****TLI 15200 Business Principles for Organizational Leadership****TLI 21300 Project Management****TLI 25300 Principles of Technology Strategy**

Approved Study Abroad Course

**MET 42100 Air Conditioning and Refrigeration**

MET 42200 Power Plants and Energy Conversion

MET 42600 Internal Combustion Engines

MET 43200 Hydraulic Motion Control Systems

MET 43600 Pneumatic Motion Control Systems

MET 44301 Joining Processes

MET 45100 Manufacturing Quality Control

MET 48200 Mechatronics

MET 48600 Fundamentals of Motorsports

MET 49000 Green Manufacturing and Sustainability

MET 49900 Mechanical Engineering Technology Independent Study

MET 42100 Air Conditioning And Refrigeration

MET 42200 Power Plants and Energy Conversion

MET 42600 Internal Combustion Engines

MET 43200 Hydraulic Motion Control Systems

MET 43600 Pneumatic Motion Control Systems

GER 33000 German Cinema

HIST 30000 Eve of Destruction

HIST 33300 Science &amp; Technology in Western Civilization I

HIST 33400 Science &amp; Technology in Western Civilization II

HIST 35000 Science &amp; Technology in Twentieth Century World

HIST 36000 Gender in Middle East History

JPNS 28000 Introduction to Modern Japanese Civilization

LC 23500 East Asian Literature in Translation

LC 23900 Contemporary Foreign Women Writers in Translation

MFET 35800 Smart Manufacturing and the Global Economy

MGMT 45500 Legal Background for Business

MSL 30200 Leadership &amp; Ethics

MUS 37600 World Music

NS 41300 Naval Leadership Management &amp; Ethics

OLS 45600 Tech &amp; the Global Society

PHIL 11400 Global Moral Issues for Engineers

PHIL 20600 Philosophy of Religion  
PHIL 29000 Environmental Ethics  
POL 23100 Introductions to United States Foreign Policy  
POL 23500 International Relations among Rich and Poor Nations  
PSY 33500 Stereotyping & Prejudice  
PTGS 33000 Brazilian, Portuguese & African Cinema  
SOC 31000 Racial & Ethnic Diversity

SPAN 23500 Spanish American Literature in Translation  
SPAN 33000 Spanish & Latin American Cinema  
**TECH 33000 Tech and the Global Society**  
**Approved Study Abroad Course**

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