

***Bold** denotes Columbus location course offering.

Departmental/Program Major Courses (120 credits)

Required Major Courses (59 credits)

- _____ (3) MET 10200 – Production Specifications
- _____ (3) MET 11100 – Applied Statics
- _____ (3) MET 14300 – Materials and Processes I
- _____ (3) MET 14400 – Materials and Processes II (MET Gateway Course)
- _____ (4) MET 21100 – Applied Strength of Materials
- _____ (3) MET 21300 Dynamics
- _____ (3) MET 22000 Heat/Power
- _____ (3) MET 23000 -- Fluid Power
- _____ (3) MET 24500 – Manufacturing Systems
- _____ (3) MET 28400 – Introduction to Industrial Controls
- _____ (3) MET 31300 – Fluid Mechanics
- _____ (3) MET 32000 – Thermodynamics
- _____ (3) MET 34600 (Advanced Materials in Manufacturing)
- _____ (3) ENGT 18000—Engineering Technology Foundations
- _____ (1) ENGT 18100—Engineering Technology Applications

MET Selectives – (15 credits, included in required major credit total)

- _____ (3) MET Elective or approved Focus Area elective
- _____ (3) Mechanics Selective
- _____ (3) MET Capstone Selective I
- _____ (3) MET Capstone Selective II
- _____ (3) Technical Selective or approved Focus Area Selective

Other Departmental/Program Course Requirements (61 credits)

- _____ (3) COM 11400 - Fundamentals of Speech Communication ***(COMM R110)** (satisfies Oral Communication for core)
- _____ (3) COM 32000- Small Group Discussion or ***(COMM C223 or *COMM C325 or *COMM C380)**
- _____ (3) ENGL 42100 – Technical Writing (ICN) or ***(ENG W231)**
- _____ (3) IET 45100 or TLI 33400 – engineering economics
- _____ (3) MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- _____ (3) MA 16020 - Applied Calculus II
- _____ (3) ECET 22400 – Electronics Systems
- _____ (3) CHM 11100 – General Chemistry ***(CHEM C101 + C121 or CHEM C105 + CHEM C125)**
- _____ (4) PHYS 22000 - General Physics ***(PHYS 21800)** (satisfies Science for core)
- _____ (4) PHYS 22100 - General Physics II ***(PHYS 21900)** (satisfies Science for core)
- _____ (3) STAT 30100 – Statistical Methods
- _____ (3) TECH 12000 - Design Thinking in Technology (satisfies Information Literacy and Science, Technology & Society for core)
- _____ (3) Freshman Comp Selective (choose from ENGL 10600 or ENGL 10800) ***(ENG W131)** (satisfies Written Communication for core)
- _____ (3) Economics/Finance Selective (choose from ECON 21000, ECON 25100, ECON 25200, CSR 34200, ENTR 20000 and 31000) ***(ECON E201 or ECON E202)**
- _____ (3) General Education Human Cultures: Humanities Selective (satisfies Human Cultures Humanities for core)
- _____ (3) General Education Human Cultures: Behavior/Social Sciences (satisfies Human Cultures: Behavioral Sciences for core)
- _____ (2) Computer Graphics Technology Selective (choose from **CGT 11000, CGT 16300, IT 10500**)
- _____ (3) Programming Selective (choose from **CNIT 10500, CNIT 15501, CNIT 17500, CS 15800 or CS 15900, MET 16400**)
- _____ (3) Global/Professional Selective (**TECH 33000**)
- _____ (3) TECH/MGMT Selective
- _____ (0) Beyond the Classroom Requirement

University Core Requirements

Human Cultures: Behavioral/Social Sciences	<input type="checkbox"/>	_____	Science	<input type="checkbox"/>	PHYS 21800
Human Cultures: Humanities	<input type="checkbox"/>	_____	Science	<input type="checkbox"/>	PHYS 21900
Information Literacy	<input type="checkbox"/>	TECH 12000	Science, Technology & Society	<input type="checkbox"/>	TECH 12000
Oral Communication	<input type="checkbox"/>	COMM R110	Written Communication	<input type="checkbox"/>	ENG W131
Quantitative Reasoning	<input type="checkbox"/>	MA 16010			

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

*****Updated 5/23/16WR

Accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>

Fall 1 st Year	CR	GR	Sem	Fulfilled by	Spring 1 st Year	CR	GR	Sem	Fulfilled by
Computer Graphics Technology Selective (CGT 11000, CGT 16300, or IT 10500)	2				Programming Selective	3			
COM 11400 Fundamental of Speech Communication * COMM R110 (IUPUC)	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	3				MA 16010 Applied Calculus I (Prereq: ALEKS score 75)	3			
ENGT 18100 ENG Tech Applications	1				Freshman Composition Selective	3			
TECH 12000 Design Thinking in Tech.*	3				ENG W131 (IUPUC)				
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	15			

Fall 2 nd Year	CR	GR	Sem	Fulfilled by	Spring 2 nd Year	CR	GR	Sem	Fulfilled by
ECET 22400 Electronics Systems (Pre-req: MA 16010)	3				MET 21300 Dynamics (Pre-reqs: MA 16020 and MET 11100)	3			
MA 16020 Applied Calculus II (Pre-req: MA 16010 with grade of C- or higher)	3				Humanities Selective	3			
MET 21100 Strength of Materials (Pre-reqs: MET 11100 and MA 16010)	4				MET 22000 Heat Power (Pre-reqs: PHYS 22000, MA 16010 & ENGT 18000)	3			
PHYS 22000 General Physics I PHYS 21800 (IUPUC)	4				MET 28400 Intro to Industrial Controls (Pre-req: ECET 22400)	3			
					PHYS 22100 General Physics II* (Prereq: PHYS 22000) PHYS 21900 (IUPUC)	4			
TOTAL CREDIT HOURS	14				TOTAL CREDIT HOURS	16			

Fall 3 rd Year	CR	GR	Sem	Fulfilled by	Spring 3 rd Year	CR	GR	Sem	Fulfilled by
CHM 11100 General Chemistry CHEM C101 + CHEM C121 (IUPUC)	3				Economics/Finance Selective	3			
MET 32000 Thermodynamics (Pre-reqs: MA 16010 and MET 22000)	3				MET 23000 Fluid Power (Pre-reqs: MET 11100 and MA 16010)	3			
MET 10200 Production Specifications (Pre-reqs: CGT selective and ENGT 18000)	3				MET 34600 Advanced Materials in Mfg (Pre-reqs: MET 21100, MET 24500 and CHM 11100)	3			
MET 24500 Manufacturing Systems (Pre-reqs: (MET 14300 or MET 14400) and CGT Selective)	3				Mechanics Selective MET 31601 Mechanics of Machine Design	3			
STAT 30100 Elementary Stat Methods	3				Global/Professional Selective	3			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	15			

Fall 4 th Year	CR	GR	Sem	Fulfilled by	Spring 4 th Year	CR	GR	Sem	Fulfilled by
IET 45100 or TLI 33400 engineering economics	3				MET Capstone Selective II (Pre-reqs: Capstone Selective I)	3			
MET Capstone Selective I	3				MET Elective or approved Focus Area elective	3			
MET 31300 Fluid Mechanics (Pre-reqs: MA 16020, MET 22000 and MET 23000)	3				Technical Selective or approved Focus Area elective	3			
TECH/MGMT Selective	3				Behavioral Social Science Selective	3			
ENGL 42100 Technical Writing (ICN) (Pre-req: ENGL 10600) or ENG W231 (IUPUC)	3				COM 32000 Small Group Discussion or COMM C325 or COMM C223 or COMM C380 (IUPUC)	3			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	15			

Refer to the 2016 MET supplemental Instruction form for optional courses to complete selectives and pre-requisites.

1. 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
2. Students must earn a "D-" or better in all courses unless otherwise noted.
3. Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
4. 32 credit hours of 300-level or higher courses must be completed at the Purdue University location conferring the degree.
5. Complete a Beyond the Classroom Requirement.

The student is ultimately responsible for knowing and completing all degree requirements.
myPurduePlan is knowledge source for specific requirements and completion. Updated 5/23/16 (WNR)

2016 MET SUPPLEMENTAL INFORMATION

All prerequisites must be met.

Bold indicates courses offered at Columbus location.

*Indicates IUPUC course offering for Columbus location only.

See Student Services Coordinator for course availability.

CGT SELECTIVE

CGT 11000 Technical Graphics Communications

CGT 16300 Graphical Communication and Spatial Analysis

IT 10500 Intro to Engineering Design

FRESHMAN COMPOSITION

ENGL 10600

***ENG W 131 Reading, Writing, & Inquiry I**

ENGL 10800

ECONOMICS/FINANCE SELECTIVE

CSR 3420 Personal Finance

ECON 2100 Principles of Economics

ECON 25100 Microeconomics

ECON 25200 Macroeconomics

ENTR 20000 Intro to Entrepreneurship & Innovation

***ECON E201 Intro to Microeconomics**

***ECON E202 Intro to Macroeconomics**

TECHNICAL SELECTIVE

A 300-400 level ENGR, ECET, MFET, CS or elective IET course.

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

Any MET elective course

ANSC 230 Physiology of Domestic Animals

AT 27200 Intro to Composite Technology

AT 27800 Nondestructive Testing

AT 47800 Advanced Nondestructive Testing

BCHM 22100 Analytical Biochemistry

BCM 23000 Mechanical/Electrical Systems

BCM 31500 Mechanical Construction Estimating

BCM 38000 Concrete Construction

BIOL 20300 Human Anatomy and Physiology

BIOL 22100 Introduction to Microbiology

CGT 226 Intro to Constraint Based Modeling

CHM 11200/CHM 11600 General Chemistry II

CHM 22300 Principles of Biochemistry

CHM 48100 Environmental Chemistry

CE 35000 Environmental Engineering

CE 35500 Engineering Environmental Sustainability

ENTM 21800 Introduction to Forensic Sciences

FNR 30100 Wood Products/Wood Processes

FNR 31100 Wood Structure, Identification and Properties

FNR 41800 Properties of Wood Related to Manufacturing

FNR 42500 Secondary Wood Products Manufacturing

FS 22200 Safety of Foods

HSCI 31200 Radiation Science Fundamentals

IE 47700 Work Methods and Measurement

IE 57700 Human Factors in Engineering

IT 33000 Industrial Sales and Sales Management (TLI 34300)

IT 34500 Automatic Identification and Data Capture (TLI 31300)

IT 35100 Occupational Safety and Health

IT 43400 Global Transportation & Logistics Mgmt (TLI 44275)

MA 26100 Multivariate Calculus

MFET 28400 Introduction to Robotics

MANAGEMENT SELECTIVE

AFT 35100 AF Leadership Studies I

AFT 36100 AF Leadership Studies II

ECET 38001 Global Professional Issues in ET

EDPS 31500 Leadership: Listening

EDPS 31600 Leadership: Cross-Cultural

EDPS 31700 Leadership: Mentoring

ENTR 31000 Marketing Management for New Ventures

MGMT 20000 Accounting Principles

***BUS A201 Intro to Financial Accounting**

MGMT 20010 Business Accounting

MGMT 45500 Legal Background for Business

MSL 20200 Leadership & Teamwork

MSL 30100 Leadership & Problem Solving

MSL 40100 Leadership & Management

NS 21400 Fundamentals of Leadership

NS 41300 Naval Leadership Management & Ethics

OLS 25200 Human Relations in Organizations

OLS 27400 Applied Leadership

OLS 28400 Leadership Principles

OLS 36400 Tech & the Organization

OLS 38600 Leadership for Org Change & 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

TLI 25400 Leading Change in Technology Organizations

Approved Study Abroad Course

MECHANICS SELECTIVE

MET 31100 Experimental Strength of Materials (Fall only)
MET 31400 Applications of Machine Elements

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

MET ELECTIVE (6 credit hours)

MET 30200 CAD in the Enterprise
MET 31100 Experimental Strength of Materials
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 40100 Capstone Projects I
MET 40200 Capstone Projects II
MET 41100 Introduction to the Finite Element Method

MET CAPSTONE SELECTIVE (3 credit hours)

MET 33400 Advanced Fluid Power
MET 400 Mechanical Design
MET 40100 Capstone Projects I
MET 40200 Capstone Projects II

GLOBAL/PROFESSIONAL SELECTIVE

ANTH 20500 Human Cultural Diversity
ANTH 34100 Culture & 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
FLL 23500 East Asian Literature in Translation
FLL 23900 Contemporary Foreign Women Writers in Translation
FNR 48800 Global Environmental issues
FR 33000 French Cinema
GER 23000 German Folklore & Fairy Tales
GER 23000 German Literature in Translation
GER 330 German Cinema
HIST 30000 Eve of Destruction
HIST 33300 Science & Technology in Western Civilization I
HIST 33400 Science & Technology in Western Civilization II
HIST 35000 Science & Technology in Twentieth Century World

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

Limited options and offerings for Columbus location. See Student Services Coordinator for details.

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

Limited options and offerings for Columbus location. See Student Services Coordinator for details.

MET 31500 Applied Kinematics and Dynamics
MET 31601 Mechanics of Machine Design

CS 15800 C Programming
CS 15900 Programming Applications for Engineers
MET 16400 Computing in Engineering Technology

MET 42100 Air Conditioning and Refrigeration
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 48600 Fundamentals of Motorsports
MET 490 Green Manufacturing and Sustainability
MET 49000 Inspection and Validation of Product Design
MET 49000 Vibration

MET 42100 Air Conditional and Refrigeration
MET 43200 Hydraulic Motion Control Systems
MET 43600 Pneumatic Motion Control Systems

HIST 36000 Gender in Middle East History
JPNS 28000 Introduction to Modern Japanese Civilization
MGMT 45500 Legal Background for Business
MSL 30200 Leadership & Ethics
MUS 37800 World Music
NS 41300 Naval Leadership Management & Ethics
OLS 45600 Tech & the Global Society
PHIL 114ENG Global Moral Issues for Engineers
PHIL 20600 Philosophy of Religion
PHIL 29000 Environmental Ethics
PHIL 33000 Religions of the East
PHIL 33100 Religions of the West
POL 23100 Introductions to United States Foreign Policy
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