

Departmental/Program Major Courses (120 credits)

Required Major Courses (44 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)
- _____ (1) MET 16200 – Computational Analysis Tools
- _____ (4) MET 21100 – Applied Strength of Materials
- _____ (3) MET 21300 -- Dynamics
- _____ (3) MET 21400 – Machine Elements
- _____ (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)

MET Selectives – (12 credits)

- _____ (6) MET Elective or approved Focus Area elective
- _____ (3) MET Capstone Selective
- _____ (3) Technical Selective or approved Focus Area Selective

Other Departmental/Program Course Requirements (64 credits)

- _____ (3) COM 11400 (SPCH-S121*IUK) - Fundamentals of Speech Communication (*satisfies Oral Communication for core*)
- _____ (3) COM 32000 (SPCH-S229*IUK) - Small Group Discussion
- _____ (3) ENGL 42100 (ENG-W231/321*IUK) – Technical Writing
- _____ (3) IET 45100 or TLI 33400 – Engineering Economics
- _____ (3) MA 15800 – PreCalculus or MA 15300 Algebra & Trig I and MA 15400 Algebra & Trig II (*satisfies Quantitative Reasoning for core*)
- _____ (3) MA 16010 - Applied Calculus I (*satisfies Quantitative Reasoning for core*)
- _____ (3) MA 16020 - Applied Calculus II and Differential Equations
- _____ (3) ECET 22400 – Electronic Systems
- _____ (3) CHM 11100 (CHEM-C101/C121*IUK) – General Chemistry
- _____ (4) PHYS 22000 (PHYS-P221*IUK) - General Physics (*satisfies Science for core*)
- _____ (4) PHYS 22100 (PHYS-P222*IUK) - General Physics II (*satisfies Science for core*)
- _____ (3) STAT 30100 – Statistical Techniques
- _____ (3) TECH 12000 - Design Thinking in Technology (*satisfies Information Literacy and Science, Technology & Society for core*)
- _____ (3) English Composition Selective (choose from ENGL 10600 – ENG-W131*IU) (*satisfies Written Communication for core*)
- _____ (3) Economics/Finance Selective (choose from ECON 21000, ECON 25100, ECON 25200, CSR 34200, MGMT 45500 – ECON-E101 or BUS-F260*IU)
- _____ (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) CGT Selective (choose from CGT 11000 or CGT 16300)
- _____ (3) Programming Selective (choose from CNIT 10500, CNIT 15500, CNIT 17500)
- _____ (3) Global/Professional Selective
- _____ (3) TECH/MGMT Selective

University Core Requirements

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. * Updated 12/21/2015



School of Engineering Technology
 Major: Mechanical Engineering Technology (MET)
 MET-BS Suggested Arrangement of Courses

Name: _____

Catalog Term: _____ PUID: _____

For Catalog Terms beginning in Fall 2015
 Major Code: METC Program Code: TMET-BS

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
CGT Selective (CGT 11000)	2				Programming Selective	3			
MET 14300 Materials and Processes I	3				MET 11100 Applied Statics (Prereqs: MA 15400 and MET 16200)	3			
MET 16200 Computational Anly Tools	1				MET 14400 Materials and Processes II	3			
MA 158 Precalculus*	3				MET 10200 Production Specifications (Pre-reqs: (CGT 110 and MET 16200)	3			
TECH 12000 Design Thinking in Tech.*	3				COM 11400 (SPCH-S121 *IUK) Fundamental of Speech Communication*	3			
English Comp Selective (ENG-W131 *IUK)	3								
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
MA 16010 Applied Calculus I (Prereq: MA 15400/158 with C- or better)	4				MET 21100 Strength of Materials (Pre-reqs: MET 11100 and MA 16010)	3			
MET 24500 Manufacturing Systems (Pre-reqs: (MET 14300 or MET 14400)	3				MET 23000 Fluid Power (Pre-reqs: MET 11100 and MA 16010)	3			
ECET 22400 Electronic Systems (Pre-req: MA 153 or MA 16010)	3				MA 16020 Applied Calculus/Diff Eqns. (Pre-req: MA 16010 with grade of C- or higher)	3			
PHYS 22000 (PHYS-P221 *IUK) General Physics I	5				PHYS 22100 General Physics II* (PHYS- P222 *IUK) (Prereq: PHYS 22000)	5			
					Humanities Selective	3			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	17			

Fall 3 rd Year	CR	GR	Sem	Fulfilled by	Spring 3 rd Year	CR	GR	Sem	Fulfilled by
MET 21400 Machine Elements (Pre-reqs: MET 21100 and MET 21300)	3				MET 28400 Intro to Industrial Controls (Pre-req: ECET 22400)	3			
MET 31300 Fluid Mechanics (Pre-reqs: MA 16020, MET 220 and MET 230)	3				MET 22000 Heat Power (Pre-reqs: PHYS 220, MA 16010 and MET 162)	3			
MET 21300 Dynamics (Pre-reqs: MA 16020 and MET 11100)	3				MET 34600 Advanced Materials in Mfg) (Pre-reqs: MET 211, MET 245 and CHM 11100)	3			
CHM 111 General Chemistry (CHEM- C101/121 * IUK)	5				ENGL 42100 Technical Writing (ENG- W321 *IUK)	3			
Economics/Finance Selective	3				STAT 301	3			
TOTAL CREDIT HOURS	17				TOTAL CREDIT HOURS	15			

Fall 4 th Year	CR	GR	Sem	Fulfilled by	Spring 4 th Year	CR	GR	Sem	Fulfilled by
MET 32000 Thermodynamics (Pre-reqs: MA 16010 and MET 22000)	3				MET Capstone Selective	3			
MET Elective or Focus Area elective	3				MET Elective or Focus Area elective	3			
Global/Professional Selective	3				Technical Selective or Focus Area elective	3			
TECH/MGMT Selective	3				Behavioral Social Science Selective	3			
IET 45100 Monetary Analysis or TLI 33400 Engineering Economics	3				COM 32000 (SPCH-S229 *IUK) Small Group Discussion (Pre-req: COM 11400)	3			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	15			

- 124 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 the Purdue University location conferring the degree.

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

***** Updated 12/21/2015

All prerequisites must be met.

Bold indicates courses offered at Kokomo Campus.

- **Indicates IU Kokomo course for Purdue Kokomo Campus only (See Student Services Coordinator for availability.)**

CGT SELECTIVE

CGT 11000 Technical Graphics Communications

CGT 16300 Graphical Communication and Spatial Analysis

IT 10500 Intro to Engineering Design

PROGRAMMING SELECTIVE

CNIT 10500 Introduction to C Programming

CNIT 15500 Introduction to Object---Oriented Programming

MET 16400 Computing in Engineering Technology

CNIT 17500 Visual Programming

CS 15800 C Programming

CS 15900 Programming Applications for Engineers

TECHNICAL SELECTIVE

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

A CHEM, MATH, PHYS course beyond what is required.

MATH-M303, M311, M313

Any MET elective course

AT 27200 Intro to Composite Technology

AT 27800 Nondestructive Testing

AT 47800 Advanced Nondestructive Testing

BIOL 20300 Human Anatomy and Physiology

BIOL 22100 Introduction to Microbiology

CGT 22600 Intro to Constraint Based Modeling

CHM 11200/CHM 11600 General Chemistry II (***CHEM-C102**)

CHM 22300 Principles of Biochemistry

CHM 48100 Environmental Chemistry

IE 47700 Work Methods and Measurement

IE 57700 Human Factors in Engineering

IT 33000 Industrial Sales and Sales Management

IT 34500 Automatic Identification and Data Capture

IT 35100 Occupational Safety and Health

IT 43400 Global Transportation and Logistics Management

MA 26100 Multivariate Calculus

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)

MGMT 20010 Business Accounting (BUS-A202)

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

MET ELECTIVE

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 40000 Mechanical Design

MET 41100 Introduction to the Finite Element Method

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 49000 Multidisciplinary Capstone I

MET 49000 Multidisciplinary Capstone II

MET CAPSTONE SELECTIVE

MET 33400 Advanced Fluid Power

MET 40000 Mechanical Design

MET 40100 Capstone Projects I

MET 40200 Capstone Projects II

MET 42100 Air Conditional and Refrigeration

MET 43200 Hydraulic Motion Control Systems

MET 43600 Pneumatic Motion Control Systems

MET 49000 Multidisciplinary Capstone I

MET 49000 Multidisciplinary Capstone 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
 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
 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 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

FRESHMAN COMPOSITION

ENGL 10600 (*ENG-W131)

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

*ENG-L104, FINA-F100, HIST-H105, HIST-H106, MUS-M174, PHIL-P100, PHIL-P140

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

*POLS-Y103, PSY-P103, SOC-S 100, SOC-S163

ECONOMICS/FINANCE SELECTIVE

CSR 34200 Personal Finance (*BUS-F260)
 MGMT 45500 Legal Environment of Business (*BUS-L201)
 ECON 21000 Principles of Economics (*ECON-E10)

ECON 25100 Microeconomics
 ECON 25200 Macroeconomics
 ENTR courses 20000 and 31000

