

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) Freshman Speech Selective (choose from COM 11400, SCLA 10200) *(satisfies Oral Communication for core)*
- _____ (3) Communications Selective (Choose from COM 31500, COM 32000, COM 41500, EDPS 31500)
- _____ (3) Technical Writing Selective (choose from ENGL 42100, ENGL 42400)
- _____ (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
- _____ (4) PHYS 22000 - General Physics *(satisfies Science for core)*
- _____ (4) PHYS 22100 - General Physics II *(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 Composition Selective (choose from ENGL 10600 or ENGL 10800) *(satisfies Written Communication for core)*
- _____ (3) Economics/Finance Selective (choose from ECON 21000, ECON 25100, ECON 25200, CSR 34200, ENTR 20000 and 31000)
- _____ (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
- _____ (3) Technical/Management (TECH/MGMT) Selective
- _____ (0) Professional Requirement
- _____ (0) Intercultural Requirement

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 4/20/2018

Fall 1 st Year	CR	GR	Fulfilled by	Spring 1 st Year	CR	GR	Fulfilled by
MA 16010 Applied Calculus I (Prereq: ALEKS score 75)	3			MA 16020 Applied Calculus II (Pre-req: MA 16010 with grade of C- or higher)	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		
Computer Graphics Technology Selective (CGT 11000, CGT 16300, or IT 10500)	2			MET 10200 Production Specifications (Pre-reqs: CGT selective and ENGT 18000)	3		
ENGT 18000 ENG Tech Foundations	3			Freshman Composition Selective* (ENG-W131)	3		
ENGT 18100 ENG Tech Applications	1						
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 Electronics Systems (Pre-req: MA 16010)	3			MET 22000 Heat Power (Pre-reqs: PHYS 22000, MA 16010 and ENGT 18000)	3		
Programming Selective	3			Freshman Speech Selective*+ (SPCH-S121)	3		
MET 21100 Strength of Materials (Pre-reqs: MET 11100 and MA 16010)	4			MET 23000 Fluid Power (Pre-reqs: MET 11100 and MA 16010)	3		
PHYS 22000 General Physics I (PHYS-P201 or PHYS-P221)	4			MET 28400 Intro to Industrial Controls (Pre-req: ECET 22400)	3		
				PHYS 22100 General Physics II* (Prereq: PHYS 22000) (PHYS-P202 or PHYS-P222)	4		
TOTAL CREDIT HOURS	14			TOTAL CREDIT HOURS	16		

Fall 3 rd Year	CR	GR	Fulfilled by	Spring 3 rd Year	CR	GR	Fulfilled by
CHM 11100 General Chemistry	3			Economics/Finance Selective	3		
MET 21300 Dynamics (Pre-reqs: MA 16020 and MET 11100)	3			Humanities Selective	3		
MET 24500 Manufacturing Systems (Pre-reqs: (MET 14300 or MET 14400) and CGT Selective)	3			MET 34600 Advanced Materials in Mfg (Pre-reqs: MET 21100, MET 24500 and CHM 11100)	3		
MET 32000 Thermodynamics (Pre-reqs: MA 16010 and MET 22000)	3			Technical Writing Selective + (ENG-W321)	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	Fulfilled by	Spring 4 th Year	CR	GR	Fulfilled by
MET Capstone Selective I	3			MET Capstone Selective II (Pre-reqs: Capstone Selective I)	3		
MET 31300 Fluid Mechanics (Pre-reqs: MA 16020, MET 22000 and MET 23000)	3			MET Elective or approved Focus Area elective	3		
TLI 33400 engineering economics	3			Technical Selective or approved Focus Area elective	3		
Technical/Management Selective	3			Behavioral Social Science Selective	3		
Mechanics Selective	3			Communications Selective +	3		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	15		

Refer to the 2018 MET supplemental Instruction form for optional courses to complete selectives and pre-requisites.

- 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.

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

***** Updated 4/20/2018

2018-2019 MET SUPPLEMENTAL INFORMATION
All prerequisites must be met.
Bold indicates courses offered at the Kokomo Campus.
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 First-Year Composition

ENGL 10800 Accelerated First-Year Composition

ENG-W131

FRESHMAN SPEECH SELECTIVE

COM 11400 Fundamentals Of Speech Communication

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

SPCH-S121

ECONOMICS/FINANCE SELECTIVE

CSR 3420 Personal Finance

ECON 2100 Principles of Economics

ECON 25100 Microeconomics

ECON 25200 Macroeconomics

ENTR 20000 Introduction To Entrepreneurship And Innovation

ECON-E201

ECON-E202

BUS-F260

COMMUNICATION 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

SPCH-S223

SPCH-S229

TECHNICAL WRITING SELECTIVE

ENGL 42100 Technical Writing

ENGL 42400 Writing For High Technology Industries

ENG-W321

TECHNICAL SELECTIVE

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

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

Any MET elective course

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 22600 Introduction To Constraint-Based Modeling

CHM 11200 General Chemistry

CHM 11600 General Chemistry

CHM 48100 Environmental Chemistry

CE 35000 Introduction To Environmental And Ecological Engineering

CE 35500 Engineering Environmental Sustainability

FS 22200 Safety of Foods

HSCI 31200 Radiation Science Fundamentals

IE 57700 Human Factors In Engineering

IT 33000 Industrial Sales And Sales Management

IT 34500 Automatic Identification And Data Capture

IT 35100 Advanced Industrial Safety And Health Management

IT 43400 Global Transportation And Logistics Management

MA 26100 Multivariate Calculus

NS 35000 Naval Ship Systems

CHEM-C102

TLI 31300

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

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
MET 31500 Applied Kinematics and Dynamics

MET 31601 Mechanics of Machine Design
MET 31700 Machine Diagnostics
MET 41100 Introduction to the Finite Element Method

PROGRAMMING SELECTIVE

CNIT 10500 Introduction to C Programming
CNIT 15501 Introduction To Software Development Concepts
CNIT 17500 Visual Programming
CS 15800 C 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

MET ELECTIVE (6 credit hours)

MET 30200 CAD in the Enterprise (Spring Only)
MET 31100 Experimental Strength of Materials (Fall only)
MET 31700 Machine Diagnostics (Spring Only)
MET 33400 Advanced Fluid Power (Spring Only)
MET 34900 Stringed Instrument Design and Manufacture
MET 38200 Controls and Instrumentation for Automation (Spring Only)
MET 40000 Mechanical Design
MET 40100 Capstone Projects I (Fall only)
MET 40200 Capstone Projects II (Spring Only)
MET 41100 Introduction to the Finite Element Method (Spring Only)

MET 42100 Air Conditioning and Refrigeration (Fall only)
MET 42200 Power Plants And Energy Conversion
MET 42600 Internal Combustion Engines (Fall only)
MET 43200 Hydraulic Motion Control Systems (Spring Only)
MET 43600 Pneumatic Motion Control Systems (Fall only)
MET 44301 Joining Processes
MET 45100 Manufacturing Quality Control (Fall only)
MET 48200 Mechatronics
MET 48600 Fundamentals of Motorsports
MET 49000 Green Manufacturing and Sustainability

MET CAPSTONE SELECTIVES I & II

ECET 43000 Electrical And Electronic Product And Program Management
ECET 43100 International Capstone Project Planning And Design
ECET 46000 Project Design And Development
ECET 46100 International Capstone Project Execution
ENGT 40500 Entrepreneurial Capstone I
ENGT 40600 Entrepreneurial Capstone II
MET 33400 Advanced Fluid Power
MET 40000 Mechanical Design
MET 40100 Capstone Projects I

MET 40200 Capstone Projects II
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
MFET 48000 Project Planning For Integration
MFET 48100 Integration Of Manufacturing Systems

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
FNR 48800 Global Environmental issues
FR 33000 French Cinema
GER 23000 German Folklore & Fairy Tales
GER 23000 German Literature in Translation
GER 28000 Beer Brewing in the German Culture
GER 33000 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

LC 23500 East Asian Literature in Translation
LC 23900 Contemporary Foreign Women Writers in Translation
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 23000 Religions of the East
PHIL 23100 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

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

ENG-L204, HIST-H105, HIIST-H106, HIST-H113, HIST-H114, PHIL-P100, PHIL-P140, FINA-A101, FINA-A102, MUS-M174, SPAN S100-400, FREN-F100-400, GER-G100-400

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

ANTH-A104, ECON-E201, ECON-E202, POLS-Y103, PSY-P103, SOC-S100

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their profession prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	Industry-sponsored senior capstone
Automatic	EPICS courses, minimum of two
Automatic	Lab Assistant (satisfactory completion of a minimum of one lab division for one term; e.g., ECET 29900 or MET 39200)
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC, reservist, active duty, veteran)
Faculty	Other undergraduate research experiences (e.g., employed in the AEL as lab technician)
Faculty	Independent study – by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment

GLOBALIZATION REQUIREMENT

- Complete the Pre and Post-test Intercultural Development Inventory Assessments (1st year and Last year)
- Earn three credit hours in a global culture course:

AAS 27100	Intro to African American Studies	OLS 35000	Creativity In Business & Industry
AAS 37300	Variable Title: History of Injustice	PHIL 11400	Global Moral Issues
AGR 20100	Communication Across Cultures	PHIL 43500	Philosophy of Mind
ANSC 38100	Leadership for a Diverse workplace	POL 22200	Women, Politics & Public Policy
ANTH 20300	Biological Bases of Human Social Behavior	POL 23500	Rich and Poor Nations
ANTH 20500	Human cultural Diversity	POL 32600	Black Political Participation in America
ANTH 21000	Technology and Culture	POL 32700	Global Green Politics
ANTH 21200	Culture, Food and Health	POL 36000	Women and the Law
ANTH 23000	Gender Across Cultures	POL 41300	The Human Basis of Politics
ANTH 34000	Global Perspectives on Health	POL 42300	International Environmental Policy
ANTH 34100	Culture and Personality	POL 42900	Variable Title: It's a Complex World (Cross listed with IE49000, ME29700)
ANTH 37900	Native American Cultures	POL 43300	International Organization
ARAB 28000	Arabic culture	PSY 25000	Psychology of Adjustment
ASAM 24000	Intro to Asian American Studies	PSY 25100	Health Psychology
AT 23300	Ethics and Aviation	PSY 28500	Consumer Behavior
COM 22400	Communicating in the Global Workplace	PSY 32200	Research Design
COM 30300	Intercultural Communication	SOC 10000	Intro to Sociology
COM 32000	Small Group Communication	SOC 31000	Racial and Ethnic Diversity
COM 37300	Self-Presentation & Social Image	SOC 33900	Introduction to Sociology of Developing Nations
COM 38000	Sociolinguistic Study of African American English	TECH 33000	Technology and the Global Society
COM 38000	Sociolinguistic Study of African American English	WGSS 28200	Intro to LGBT Studies
COM 41200	Theories of Human interaction	WGSS 38000	Gender and Multiculturalism
COM 42300	Leadership, Communication & Organizations	WGSS 38300	Women and Work
ECET 29000	International Experience	Any foreign language 200 or higher (201, 202, 301, 302, 401, 402)	
ECET 38001	Global Professional Issues in ET	PSY-P103	General Psychology
EDPS 23500	Learning and Motivation	SOC-S100	Introduction to Sociology
EDPS 30000	Student Leadership Development	SPCH-S229	Discussion and Group Methods
EDPS 30100	Peer Counselling Training	SPCH-S223	Business and Professional Communication
EDPS 31500	Collaborative Leadership: Listening	CNIT 32000	Policy, Regulation, and Globalization in information Technology
EDPS 31600	Collaborative Leadership: Cross-cultural Settings	TLI 11200	Foundations of Tech. Leadership
EDPS 31700	Collaborative Leadership: Mentoring		
ENGL 41400	Literature & Culture		
HDFS 23300	Stress and Human Health		
HDFS 28000	Diversity in Individual and Family Life		
HDFS 33200	Stress & Coping in Contemporary Families		
HEBR 38500	The Holocaust in Modern Hebrew Literature		
HIST 19500	Historical Research & Film!		
HIST 30000	Eve of Destruction: Global Crises and World Organization in the 20th Century		
HIST 33805	History of Human Rights		
HIST 35000	Science and Society in the 20th-Century World		
HIST 36600	Hispanic Heritage of the USA		
HIST 37700	History & Culture of Native America		
HIST 46900	Black Civil Rights Movement		
HIST 47900	American Representations of Middle East & North Africa		
HIST 49900	History of Sexual Regulation in the United States		
HTM 37000	Sustainable Tourism and Responsible Travel		
HTM 37200:	Global Tourism Geography		
MSL 20100	Individual Leadership Studies		