PURDUE UNIVERSITY

Kokomo School of Engineering Technology   Name: _____

Major: Mechanical Engineering Technology (MET)

MET-BS Suggested Arrangement of Courses   Catalog Term: _____ PUID: _____

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

Fall 1st Year	CR	GR	Fulfilled by	Spring 1st 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*	3		
ENGT 18100 ENG Tech Applications	1						
TOTAL CREDIT HOURS	**15**			**TOTAL CREDIT HOURS**	**15**		

Fall 2nd Year	CR	GR	Fulfilled by	Spring 2nd Year	CR	GR	Fulfilled by
ECET 22400 Electronics Systems (Pre-req: MA 16010)	3			MET 21300 Dynamics (Pre-reqs: MA 16020 and MET 11100)	3		
Programming Selective	3			Freshman Speech Selective*+	3		
MET 21100 Strength of Materials (Pre-reqs: MET 11100 and MA 16010)	4			MET 28400 Intro to Industrial Controls (Pre-req: ECET 22400)	3		
PHYS 22000 General Physics I **(PHYS-P201 or PHYS-P221)**	4			Humanities Selective	3		
				PHYS 22100 General Physics II* (Prereq: PHYS 22000) **(PHYS-P202 or PHYS-P222)**	4		
TOTAL CREDIT HOURS	**14**			**TOTAL CREDIT HOURS**	**16**		

Fall 3rd Year	CR	GR	Fulfilled by	Spring 3rd Year	CR	GR	Fulfilled by
CHM 11100 General Chemistry	3			Mechanics Selective	3		
MET 22000 Heat Power (Pre-reqs: PHYS 22000, MA 16010 and ENGT 18000)	3			MET 34600 Advanced Materials in Mfg (Pre-reqs: MET 21100, MET 24500 and CHM 11100)	3		
MET 23000 Fluid Power (Pre-reqs: MET 11100 and MA 16010)	3			Technical Writing Selective + **(ENG-W321)**	3		
MET 24500 Manufacturing Systems (Pre-reqs: (MET 14300 or MET 14400) and CGT Selective)	3			Economics/Finance Selective	3		
STAT 30100 Elementary Stat Methods	3			Global/Professional Selective	3		
TOTAL CREDIT HOURS	**15**			**TOTAL CREDIT HOURS**	**15**		

Fall 4th Year	CR	GR	Fulfilled by	Spring 4th 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		
MET 32000 Thermodynamics (Pre-reqs: MA 16010 and MET 22000)	3			Technical Selective or approved Focus Area elective	3		
Technical/Management Selective	3			Behavioral Social Science Selective	3		
TLI 33400 Engineering Economics	3			Communications Selective +	3		
TOTAL CREDIT HOURS	**15**			**TOTAL CREDIT HOURS**	**15**		

Refer to the 2019 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 Purdue University.
5. 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 4/5/2019*

KOKOMO 2019-2020 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   IT 10500 Intro to Engineering Design
CGT 16300 Graphical Communication and Spatial Analysis

FRESHMAN COMPOSITION

ENGL 10600 First-Year Composition   **SCLA 10100 Transformative Texts, Critical Thinking And Communication I:**
ENGL 10800 Accelerated First-Year Composition   **Antiquity To Modernity**
ENG-W131

FRESHMAN SPEECH SELECTIVE

COM 11400   Fundamentals Of Speech Communication   **SPCH-S121**
SCLA 10200 Transformative Texts, Critical Thinking And Communication II:
Modern World

ECONOMICS/FINANCE SELECTIVE

CSR 34200 Personal Finance   ENTR 20000 Introduction To Entrepreneurship And Innovation
ECON 2100 Principles of Economics   **ECON-E201**
ECON 25100 Microeconomics   **ECON-E202**
ECON 25200 Macroeconomics   **BUS-F260**

COMMUNICATION SELECTIVE

COM 31500 Speech Communication Of Technical Information   EDPS 31500 Collaborative Leadership: Interpersonal Skills
COM 32000 Small Group Communication   **SPCH-S223**
COM 41500 Discussion Of Technical Problems   **SPCH-S229**

TECHNICAL WRITING SELECTIVE

ENGL 42100 Technical Writing   **ENG-W321 or ENG-W231**
ENGL 42400 Writing For High Technology Industries

TECHNICAL SELECTIVE

A 300-400 level ENGR, ECET, MFET, CS or elective IET course. (except MFET 30000)   CHM 11600 General Chemistry
CHM 48100 Environmental Chemistry
A CHM, MA, PHYS or STAT course beyond what is required.   CE 35000 Introduction To Environmental And Ecological Engineering
Any MET elective course   CE 35500 Engineering Environmental Sustainability
ANSC 23000 Physiology Of Domestic Animals   HSCI 31200 Radiation Science Fundamentals
AT 27200 Introduction To Composite Technology   IE 57700 Human Factors In Engineering
AT 27800 Nondestructive Testing For Aircraft   IT 33000 Industrial Sales And Sales Management
AT 47800 Advanced Nondestructive Testing   IT 34500 Automatic Identification And Data Capture
BCHM 22100 Analytical Biochemistry   IT 35100 Advanced Industrial Safety And Health Management
BCM 23000 Mechanical And Electrical Systems   IT 43400 Global Transportation And Logistics Management
BCM 31500 Mechanical Construction Estimating   MA 26100 Multivariate Calculus
BCM 38000 Concrete Construction   MFET 28800 Smart Manufacturing Operational And Information Networks
BIOL 20300 Human Anatomy And Physiology   NS 35000 Naval Ship Systems
BIOL 22100 Introduction To Microbiology   **CHEM-C102**
CGT 22600 Introduction To Constraint-Based Modeling   **TLI 31300 Technology Innovation And Integration: Bar Codes To Biometrics**
CGT 30301 Digital Manufacturing   **TLI 33620 Total Productive Maintenance**
CHM 11200 General Chemistry

MANAGEMENT SELECTIVE

AFT 35100 AF Leadership Studies I   MSL 40100 Leadership & Management
AFT 36100 AF Leadership Studies II   NS 21400 Fundamentals of Leadership
ECET 38001 Global Professional Issues in ET   NS 41300 Naval Leadership Management & Ethics
EDPS 31500 Leadership: Listening   **OLS 25200 Human Relations in Organizations**
EDPS 31600 Leadership: Cross-Cultural   **OLS 27400 Applied Leadership**
EDPS 31700 Leadership: Mentoring   **OLS 28400 Leadership Principles**
ENTR 31000 Marketing Management for New Ventures   OLS 36400 Tech & the Organization
ENTR 31500 Business Planning For Social Entrepreneurship   **OLS 38600 Leadership for Org Change & Innov**
MFET 35800 Smart Manufacturing And The Global Economy   PSY 27200 Intro to Industrial-Organizational Psych
MGMT 20000 Accounting Principles   **TLI 11200 Foundations of Organizational Leadership**
MGMT 20010 Business Accounting   **TLI 15200 Business Principles for Organizational Leadership**
MGMT 45500 Legal Background for Business   **TLI 21300 Project Management**
MSL 20200 Leadership & Teamwork   **TLI 25300 Principles of Technology Strategy**
MSL 30100 Leadership & Problem Solving   **TLI 25400 Leading Change in Technology Organizations**

TLI 41400 Financial Analysis For Technology Systems   **Approved Study Abroad Course**

MECHANICS SELECTIVE

MET 31100 Experimental Strength of Materials (Fall only)   MET 31601 Mechanics of Machine Design
MET 31400 Applications of Machine Elements   MET 31700 Machine Diagnostics
MET 31500 Applied Kinematics and Dynamics   MET 41100   Introduction to the Finite Element Method

PROGRAMMING SELECTIVE

CNIT 10500 Introduction to C Programming   CS 15900 Programming Applications for Engineers
CNIT 15500 Introduction to Object-Oriented Programming   CS 17700 Programming With Multimedia Objects
CNIT 15501 Introduction To Software Development Concepts   CS 18000 Problem Solving And Object-Oriented Programming
CNIT 17500 Visual Programming   MET 16400 Computing In Engineering Technology
CS 15800 C Programming

MET ELECTIVE (6 credit hours)

MET 30200 CAD in the Enterprise (Spring Only)   MET 41100 Introduction to the Finite Element Method (Spring Only)
MET 31100 Experimental Strength of Materials (Fall only)   **MET 42100 Air Conditioning and Refrigeration (Fall only)**
MET 31400 Applications Of Machine Elements   **MET 42200 Power Plants And Energy Conversion**
MET 31500 Applied Mechanism Kinematics And Dynamics   MET 42600 Internal Combustion Engines (Fall only)
MET 31601 Mechanics Of Machine Design   MET 43200 Hydraulic Motion Control Systems (Spring Only)
MET 31700 Machine Diagnostics (Spring Only)   MET 43600 Pneumatic Motion Control Systems (Fall only)
MET 33400 Advanced Fluid Power (Spring Only)   MET 44301 Joining Processes
MET 34900 Stringed Instrument Design and Manufacture   MET 45100 Manufacturing Quality Control (Fall only)
MET 38200 Controls and Instrumentation for Automation (Spring Only)   MET 48200 Mechatronics
MET 40000 Mechanical Design   MET 48600 Fundamentals of Motorsports
MET 40100 Capstone Projects I (Fall only)   MET 49000 Special Topics In MET
MET 40200 Capstone Projects II (Spring Only)   MET 49900 Mechanical Engineering Technology - Independent Study

MET CAPSTONE SELECTIVEs I & II

ECET 43000 Electrical And Electronic Product And Program Management   **MET 40200 Capstone Projects II**
ECET 43100 International Capstone Project Planning And Design   **MET 42100 Air Conditioning And Refrigeration**
ECET 46000 Project Design And Development   **MET 42200 Power Plants And Energy Conversion**
ECET 46100 International Capstone Project Execution   MET 42600 Internal Combustion Engines
ENGT 40500 Entrepreneurial Capstone I   MET 43200 Hydraulic Motion Control Systems
ENGT 40600 Entrepreneurial Capstone II   MET 43600 Pneumatic Motion Control Systems
MET 33400 Advanced Fluid Power   MFET 48000 Project Planning For Integration
MET 40000 Mechanical Design   MFET 48100 Integration Of Manufacturing Systems
MET 40100 Capstone Projects I

GLOBAL/PROFESSIONAL SELECTIVE

ANTH 20500 Human Cultural Diversity   LC 23500 East Asian Literature in Translation
ANTH 34100 Culture & Personality   LC 23900 Contemporary Foreign Women Writers in Translation
ARAB 28000 Arabic Culture   MFET 35800 Smart Manufacturing And The Global Economy
CHNS 28000 Selected Topics on China   MGMT 45500 Legal Background for Business
CHNS 28500 Chinese Calligraphy   MSL 30200 Leadership & Ethics
COM 22400 Communicating in the Global Workplace   MUS 37600 World Music
COM 30300 Intercultural Communication   NS 41300 Naval Leadership Management & Ethics
ECET 38001 Global Professional Issues In ET   **OLS 45600 Tech & the Global Society**
EDPS 31600 Leadership: Cross-Cultural   PHIL 11400 Global Moral Issues for Engineers
FNR 48800 Global Environmental issues   PHIL 20600 Philosophy of Religion
FR 33000 French Cinema   PHIL 29000 Environmental Ethics
GER 23000 German Literature in Translation   POL 23100 Introductions to United States Foreign Policy
GER 28000 German Special Topics - Beer Brewing in the German Culture   PSY 33500 Stereotyping & Prejudice
GER 33000 German Cinema   PTGS 33000 Brazilian, Portuguese & African Cinema
HIST 30000 Eve of Destruction: Global Crises And World Organization In The 20th Century   SOC 31000 Racial & Ethnic Diversity
    SPAN 23500 Spanish American Literature in Translation
HIST 33300 Science & Technology in Western Civilization I   SPAN 33000 Spanish & Latin American Cinema
HIST 33400 Science & Technology in Western Civilization II   **TECH 33000 Tech and the Global Society**
HIST 36000 Gender in Middle East History   **Approved Study Abroad Course**
JPNS 28000 Introduction to Modern Japanese Civilization

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

Approved Professional Requirement Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (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 or industry project

* Approval Key:
- Automatic – student participation in this professional experience is already documented through existing means.
- Advisor – advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty – designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement

INTERCULTURAL REQUIREMENT

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*
- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program, or

Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

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