

Fall 1 st Year	CR	GR	Sem	Fulfilled by	Spring 1 st Year	CR	GR	Sem	Fulfilled by
TECH 12000 Design Thinking in Tech*	3				MA 16010 Applied Calculus I*	3			
Freshman Composition Selective*	3				Freshman Speech Selective*	3			
ENGT 18200 Engineering Tech Gateway	4				MET 11100 Applied Statics	3			
MA 15800 Precalculus –Functions & Trig	3				MFET 24800 Introduction to Robotics	3			
Computer Graphics Tech Selective	2				MET 14300 Materials & Processes I or MET 14400 Materials & Processes II	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 16020 Applied Calculus II	3				ECET 27900 Embedded Digital Systems	3			
ECET Selective	3				ECET Selective	3			
MET 21100 Applied Strength of Materials	4				MET 23000 Fluid Power	3			
PHYS 22000 General Physics I*	4				MET 28400 Introduction to Industrial Controls	3			
					PHYS 22100 General Physics II	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
ECET 33700 Analog Signal Processing	3				ECET 32700 Data Acquisitions and Signal Processing	3			
MET 24500 Manufacturing Systems	3				IET 31600 Statistical Quality Control or STAT 30100 Elem Statistical Methods	3			
Computer-Aided Design Selective (MET 10200 Production Design & Specs)	3				MET 38200 Controls and Instrumentation	3			
TLI 11200 Foundations of Organizational Leadership	3				Humanities Foundation Selective*	3			
Programming Selective	3				Advanced Oral Communication 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
Senior Capstone Project Selective	3				Senior Capstone Project Selective	3			
IET 33400 Economic Analysis for Tech Systems or IT 45000 Production Cost Analysis (P: MA 15800)	3				ECON 21000 Principles of Economics*	3			
Global/Professional Selective	3				MFET 37400 Manufacturing Integration	3			
Technical Writing Selective*	3				MET 48200 Mechatronics	3			
MFET 34400 Automated Manufacturing Processes	3				IET 21400 Intro to Supply Chain Systems	3			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	15			

*Fulfills University Core Requirement

- 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
- 2.0 Graduation GPA required for Bachelor of Science degree.
- 32 credits of upper division courses (30000 level or higher) must be taken at Purdue University.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- Complete a Professional Requirement. Complete an Intercultural Requirement.

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

Name: _____ PUID: _____ Date: _____

Departmental/Program Major Courses (49 credits)

- _____ (2) Computer Graphics Technology Selective
- _____ (3) Computer-Aided Design Selective
- _____ (3) ECET Selective
- _____ (3) ECET Selective
- _____ (4) ENGT 18200 Engineering Technology Gateway
- _____ (3) Global/Professional Selective
- _____ (3) IET 21400 Introduction to Supply Chain Systems
- _____ (3) IET 31600 Statistical Quality Control or STAT 30100 Elementary Statistical Methods
- _____ (3) IET 33400 Economic Analysis for Tech Systems or IT 45000 Production Cost Analysis
- _____ (3) MET 11100 Applied Statics
- _____ (3) MET 14300 Materials & Processes I or MET 14400 Materials & Processes II
- _____ (4) MET 21100 Applied Strength of Materials
- _____ (3) MET 24500 Manufacturing Systems
- _____ (3) Programming Selective
- _____ (3) Senior Capstone Project Selective I
- _____ (3) Senior Capstone Project Selective II

Other Departmental /Program Course Requirements (34 credits)

- _____ (3) Advanced Oral Communication Selective
- _____ (3) ECON 21000 (*satisfies Human Culture Behavioral/Social Science for core*)
- _____ (3) Freshman Composition Selective (*satisfies Written Communication for core*)
- _____ (3) Freshman Speech Selective (*satisfies Oral Communication for core*)
- _____ (3) Humanities Foundation Selective (*satisfies Human Cultures Humanities for core*)
- _____ (3) MA 15800 – Precalculus – Functions and Trigonometry (*satisfies Quantitative Reasoning for core*)
- _____ (3) MA 16010 - Applied Calculus I
- _____ (4) PHYS 22000 General Physics (*satisfies Science for core*)
- _____ (3) TECH 12000 Design Thinking in Technology (*satisfies Science, Tech, & Society Selective and Information Literacy for core*)
- _____ (3) TLI 11200 Foundation of Organizational Leadership
- _____ (3) Technical Writing Selective
- _____ (0) Intercultural Requirement
- _____ (0) Professional Requirement

CONCENTRATION: Mechatronics (37 credits)

- _____ (3) MA 16020 Applied Calculus II
- _____ (4) PHYS 22100 General Physics II
- _____ (3) ECET 27900 Embedded Digital Systems
- _____ (3) ECET 32700 Data Acquisitions and Signal Processing
- _____ (3) ECET 33700 Analog Signal Processing
- _____ (3) MET 23000 Fluid Power
- _____ (3) MET 28400 Introduction to Industrial Controls
- _____ (3) MET 38200 Controls and Instrumentation
- _____ (3) MET 48200 Mechatronics
- _____ (3) MFET 24800 Introduction to Robotics
- _____ (3) MFET 34400 Automated Manufacturing Processes
- _____ (3) MFET 37400 Manufacturing Integration

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.
Degree Works is knowledge source for specific requirements and completion**

ET Supplemental Information

All prerequisites must be met.

FRESHMAN COMPOSITION SELECTIVE

ENGL 10600 First-Year Composition

ENGL 10800 Accelerated First Year Composition

SCLA 10100 Transformative Texts, Critical Thinking & Comm I: Antiquity to Modernity

FRESHMAN SPEECH SELECTIVE

COM 11400 Fundamental of Speech Communication

SCLA 10200 Transformative Texts, Critical Thinking & Comm II: Modern World

TECHNICAL WRITING SELECTIVE

ENGL 42100 Technical Writing

ENGL 42400 Writing for High Technology Industries

PROGRAMMING SELECTIVES

CNIT 10500 Introduction to C Programming

CNIT 17500 Visual Programming

CNIT 15501 Introduction to Software Development Concepts

MET 16400 Computing in Engineering Technology

ECET SELECTIVES

Select one two-course sequence from the table below.

ECET 17900 Intro to Digital Systems (<i>P: ENGT 18200 & CNIT 10500</i>)	AND	ECET 22400 Electronic Systems
ECET 22400 Electronic Systems	AND	ECET 30201 Introduction to Industrial Controls (<i>P: ECET 17700 or ECET 22400</i>)

COMPUTER GRAPHICS TECHNOLOGY SELECTIVE

CGT 11000 Technical Graphics Communication

CGT 16300 Graphical Communication and Spatial Analysis

CGT 10301 Geometric Modeling Applications

ENGT 10500 Industrial Technology Introduction to Design

COMPUTER-AIDED DESIGN SELECTIVES

CGT 22600 Introduction to Constraint-based Modeling

MET 10200 Production Design and Specifications

GLOBAL/PROFESSIONAL SELECTIVES

ECET 38001 Global/Professional Issues in Electrical Engineering Technology

TECH 33000 Technology and the Global Society

TLI 35600 Global Technology Leadership

Approved Study Abroad

ADVANCED ORAL COMMUNICATION SELECTIVE

COM 32000 Small Group Communications

COM 30300 Intercultural Communication OR COM 31400 Adv. Presentational Speaking

HUMANITIES FOUNDATION SELECTIVE

See approved UCC Humanities list at: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

SENIOR PROJECT CAPSTONE SELECTIVES

Select one two-course sequence from the table below.

<u>Senior Capstone Project Selective I</u>		<u>Senior Capstone Project Selective II</u>	
ENGT 40500 – Entrepreneurial Capstone I (for entrepreneurial minor senior students only) CET 43000 – Product/Project Management (Prerequisite: ECET 38001 & 9-12 cr. hrs. of coursework in technical focus area)	And	ENGT 40600 – Entrepreneurial Capstone II (for entrepreneurial minor senior students only)	
ECET 43100 – International Capstone Plan		ECET 46100 International Capstone Project Execution	
ENGT 48000 Engineering Technology Capstone I		EGT 48100 Engineering Technology Capstone II	

PROFESSIONAL REQUIREMENT – All Students MUST complete

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 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.

POTENTIAL PROFESSIONAL EXPERIENCES

<u>Approval Process</u>	<u>Experience</u>
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of 2
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC, 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

All students must complete the School of Engineering Technology (Polytechnic) Growth Plan for Global Awareness and Intercultural Competency at the Developmental Level (see below). Students who are interested in further developing their Global Awareness and Intercultural Competency are encouraged to complete the requirement at the Emerging Level or the Proficient Level (see advisor for more information).

Polytechnic Growth Plans for Global Awareness & Intercultural Competency

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 Pretest).

*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.

Polytechnic list of recommended Global/Cultural courses

AAS 27100 - Introduction To African American Studies
 AAS 37300 - Issues In African American Studies
 AGR 20100 - Communicating Across Culture
 ANSC 38100 - Leadership For A Diverse Workplace
 ANTH 20300 - Biological Bases Of Human Social Behavior
 ANTH 20500 - Human Cultural Diversity
 ANTH 21000 - Technology And Culture
 ANTH 21200 - Culture, Food And Health
 ANTH 23000 - Gender Across Cultures
 ANTH 34000 - Global Perspectives On Health
 ANTH 34100 - Culture And Personality
 ANTH 37900 - Native American Cultures
 ARAB 28000 - Arabic Culture
 ASAM 24000 - Introduction To Asian American Studies
 AT 22300 - Human Factors For Flight Crews
 CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
 COM 22400 - Communicating In The Global Workplace
 COM 30300 - Intercultural Communication
 COM 32000 - Small Group Communication
 COM 37300 - Self-Presentation And Social Image
 COM 41200 - Theories Of Human Interaction
 COM 42300 - Leadership, Communication And Organizations
 ECET 29000 - International Experience
 ECET 38001 - Global Professional Issues In Engineering Technology
 EDPS 30000 - Student Leadership Development
 EDPS 30100 - Peer Counseling Training
 EDPS 31500 - Collaborative Leadership: Interpersonal Skills
 EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
 EDPS 31700 - Collaborative Leadership: Mentoring
 ENGL 41400 - Studies In Literature And Culture
 HDFS 28000 - Diversity In Individual And Family Life
 HDFS 33200 - Stress And Coping In Contemporary Families
 HEBR 38500 - The Holocaust In Modern Hebrew Literature
 HIST 19500 - The Historian's Craft: Historical Research And 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 Twentieth Century World
 HIST 36600 - Hispanic Heritage Of The United States
 HIST 37700 - History And Culture Of Native America
 HIST 46900 - Black Civil Rights Movement
 HTM 37000 - Sustainable Tourism And Responsible Travel
 HTM 37200 - Global Tourism Geography
 MSL 20100 - Individual Leadership Studies
 OLS 35000 - Creativity In Business And Industry
 PHIL 11400 - Global Moral Issues
 PHIL 43500 - Philosophy Of Mind
 POL 22200 - Women, Politics, And Public Policy
 POL 23500 - International Relations Among Rich And Poor Nations
 POL 32600 - Black Political Participation In America
 POL 32700 - Global Green Politics
 POL 36000 - Women And The Law
 POL 41300 - The Human Basis Of Politics
 POL 42300 - International Environmental Policy
 POL 42900 It's a Complex World
 POL 43300 - International Organization
 PSY 12000 - Elementary Psychology
 PSY 25100 - Health Psychology
 PSY 32200 - Neuroscience Of Motivated Behavior
 SOC 10000 - Introductory Sociology
 SOC 31000 - Racial And Ethnic Diversity
 SOC 33900 - Introduction To The Sociology Of Developing Nations
 TECH 33000 - Technology And The Global Society
 TLI 11200 - Foundations Of Organizational Leadership
 TLI 31400 - Leading Innovation In Organizations
 WGSS 28200 - Introduction To LGBT Studies
 WGSS 38000 - Gender And Multiculturalism
 WGSS 38300 - Women And Work
 Any foreign language 20000 level or higher (20100, 20200, 30100, 30200)