

***Bold denotes Columbus location only course offering**

Fall 1 st Year	CR	GR	Sem	Fulfilled by	Spring 1 st Year	CR	GR	Sem	Fulfilled by
Written Comm Foundation Selective*	3				IET 11100 Introduction to Manufacturing & Supply Chain	3			
ENGT 18000 – Engineering Technology Foundations	3				MA 16010 Applied Calculus I (Prereq: MA 15800 with grade of C- or better or ALEKS score 75)	3			
ENGT 18100 – Engineering Technology Applications	1				COM 11400 Fund of Speech Comm* or SCLA 10200 Trans Texts, Critical Thking & Comm*	3			
MA 15800* - Precalculus – Functions & Trigonometry (Prereq ALEKS score 60)	3				MET 11100 Applied Statics (Pre-req: ENGT 18000)	3			
MET 14300 – Materials & Processes I or MET 14400 Materials & Processes II	3				Computer-Aided Design Selective	3			
TECH 12000 Design Thinking in Tech.*	3								
TOTAL CREDIT HOURS	16				TOTAL CREDIT HOURS	15			

Fall 2 nd Year	CR	GR	Sem	Fulfilled by	Spring 2 nd Year	CR	GR	Sem	Fulfilled by
CGT 11000 – Technical Graphic Communications or CGT 11600 Geometric Model for Visualztn & Comm	3				TLI 11200 Foundation of Organizational Leadership	3			
ECET Selective	3				ECET Selective	3			
Technical Selective	3				Programming Selective	3			
PHYS 22000 General Physics*	4				ECON 21000 Principles of Economics	3			
Humanities Foundation Selective*	3				Technical Selective	3			
TOTAL CREDIT HOURS	16				TOTAL CREDIT HOURS	15			

Fall 3 rd Year	CR	GR	Sem	Fulfilled by	Spring 3 rd Year	CR	GR	Sem	Fulfilled by
MET 24500 Manufacturing Systems (Pre-req: MET 14300 or MET 14400 & CGT 11000)	3				Technical Selective	3			
ENGL 42100 Technical Writing (Pre-req: ENGL 10600)	3				Advanced Oral Communication Selective +	3			
Technical/Management Selective	3				Global/Professional Selective	3			
TLI 31600 or IT 34200 Statistical Quality Control (Pre-req: MA 15800)	3				Lab Science Foundation Selective*	4			
Technical Selective	3				Technical Selective (30000- 40000 level)	3			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	16			

Fall 4 th Year	CR	GR	Sem	Fulfilled by	Spring 4 th Year	CR	GR	Sem	Fulfilled by
Senior Capstone Project Selective I	3				Senior Capstone Project Selective II	3			
IET 33400 Economic Analysis for Tech Systems or IT 45000 Production Cost Analysis (Pre-req: Math/Stat Selective)	3				Technical Selective (30000- 40000 level)	3			
Technical Selective (30000- 40000 level)	3				Free Elective	3			
Technical Selective (30000- 40000 level)	3				Free Elective	3			
Humanities/Liberal Arts Elective +	3								
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	12			

*Fulfills University Core Requirement

+ Denotes Cornerstone Certificate course option

- 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.**

Columbus 2020-2020 ET Supplemental Information

All prerequisites must be met.

WRITTEN COMMUNICATION SELECTIVE

ENGL 10600 First-Year Composition

ENGL 10800 Accelerated First Year Composition

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

ORAL COMMUNICATION SELECTIVE

COM 11400 Fundamental of Speech Communication

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

PROGRAMMING SELECTIVES

CNIT 10500 Introduction to C Programming

CNIT 15501 Introduction to Software Development Concepts

CNIT 17500 Visual Programming

MET 16400 Computing in Engineering Technology

ECET SELECTIVES

Select one two-course sequence from the table below.

ECET 22400 Electronic Systems	AND	ECET 30201 Introduction to Industrial Controls (P: ECET 17700 or ECET 22400) or MET 28400 Introduction to Industrial Controls (P: ECET 22400)
ECET 22400 Electronic Systems	AND	ECET 38501 (formerly ECET 38500) Intro to Automotive Electronics (P: ECET 22400 or 22700)
ECET 22400 Electronic Systems	AND	ECET 17900 Intro to Digital Systems (P: ENGT 18000, ENGT 18100 & CNIT 10500)
ECET 17700 DAQ & Systems Control (P: ENGT 18000 & 18100)	AND	ECET 17900 Intro to Digital Systems (P: ENGT 18000, ENGT 18100 & CNIT 10500)

COMPUTER-AIDED DESIGN SELECTIVES

CGT 22600 Introduction to Constraint-based Modeling

MET 10200 Production Design and Specifications

TECHNICAL /MANAGEMENT SELECTIVES

Any Management (MGMT) course at the 200-level or higher

TECH 32000 Technology and the Organization

TLI 15200 Business Principles in Org Leadership

TLI 23100 Project Management

IET 21400 Intro to Supply Chain Systems

TLI 25300 Principles of Technology Strategy

TLI 25400 Leading Change in Technology Organizations

TLI 31400 Leading Innovation in Org

IET 43530 Operations Plan & MGMT

IET 41400 Financial Analysis for Tech

Approved Study Abroad

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

TECHNICAL SELECTIVES

At least 15 credit hours must be at the 30000 level or above and at least 6 credit hours must be in the same discipline.

CGT 32300 Virtual Product Integration (P: CGT 22600)

CGT 32600 Graphics Standards for Product Definition (P: CGT 22600)

ECET 30201 Introduction to Industrial Controls (P: ECET 17700 or ECET 22400)

ECET 32100 Introduction to Nanotechnology (P: ECET 22700)

ECET 32700 Instrumentation and DAQ Design (P: Physics I and MA 16010)

ECET 38501 Intro to Automotive Electronics (P: ECET 27700 or ECET 22400) or ECET 38502 Intro to Automotive Electronics Lab

IET 23500 Introduction to Lean and Sustainable Systems
 TLI 31400 Leading Innovation in Organizations
 TLI 31500 New Product Development (P: TLI 11200) or TECH 22000 Design Technology For People
 IET 33520 Human Factors for Technology Systems
 IET 33400 Economic Factors for Technology Systems (P: MA 15800 or STAT 30100 or Math-K 310) or IT 45000 Prod Cost Analysis
 IET 33610 Risk Analysis & Assessment or IT 38500 Industrial Ergonomics
 IET 33620 Total Production Maintenance (P: TLI 31600 or IT 34200 or STAT 301, & Physics I) or IT 38100 Total Productive Main
 IET 41400 Financial Analysis for Tech Systems (P: TLI 33400 or IT 45000 or MGMT 20010) or IT 43200 Financial Transaction Distrib
 IET 43530 Operations Planning and Management (P: MA 15800) or IT 44200 Production Planning
 IET 43540 Facilities Planning (P: MET 14300 or 14400, and TLI 43530) or IT 48300 Facilities Design Lean Manufacturing
 IET 43640 Lean Six Sigma (P: TLI 31600 or IT 34200) or IT 44600 Six Sigma Quality
 TLI 45700 Technology Policy & Law
 MET 30200 CAD in the Enterprise (P: MET 10200 and MET 24500)
 MET 32000 Applied Thermodynamics (P: MET 22000 and MA 16010)
 MET 38200 Controls & Instrumentation (P: MET 28400 and MA 16010)
 MET 34600 Adv. Materials in Manufacturing (P: MET 24500, CHM 11100, and MET 21100)
 MET 42100 Air Conditioning & Refrigeration (P: MET 32000 or MET 33000)
 MET 43200 Hydraulic Motion Control (P: MET 23000 or MET 33000)
 MET 43600 Pneumatic Motion Control (P: MET 23000 or MET 33000)
 MET 45100 Manufacturing Quality Control (P: STAT 30100 or Math-K 310)
 MFET 30000 Applications of Automation in Manufacturing (P: MET 24500 and ECET 22400)
 MFET 34400 Automated Manufacturing Processes (P: MET 24500)
 MFET 34800 Advanced Industrial Robotics (P: MFET 24800 and ECET 33700)
 MFET 37400 Manufacturing Integration I (P: MET 28400)

HUMANITIES FOUNDATION SELECTIVE

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

HUMANITIES/LIBERAL ARTS ELECTIVES

Any course from the following disciplines: Anthropology, English, History, Philosophy, Political Science, Psychology, Religious Studies, Sociology, Theatre, Women's Studies, or Foreign Languages (except native language courses)

LAB SCIENCE SELECTIVES

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

FREE ELECTIVES

Any non-remedial course offered for credit at the University not already required/being used on the Plan of Study.

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>
ECET 43000 – Product/Project Management (Prerequisite: ECET 38001 & 9-12 cr. hrs. of coursework in technical focus area)	And	ECET 46000 – Project Design & Development
MET 40100 – Capstone Projects I (Prerequisites: MET 10200, MET 23000, MET 28400, MET 346000)	And	MET40200 – Capstone Projects II
MFET 48000 – Project Plan Integration (P: MFET 37400)		MFET 48100 Integration Manufacturing Systems (PL MFET 48000)
ECET 43000 –Product/Project Management (Prerequisite: ECET 38001 and 9-12 cr. hrs. of coursework in technical focus area)	And	MET 40200 – Capstone Projects II
ENGT 40500 – Entrepreneurial Capstone I (for entrepreneurial minor senior students only)	And	ENGT 40600 – Entrepreneurial Capstone II (for entrepreneurial minor senior students only)
ECET 43100 – International Capstone Plan	And	ECET 46100 International Capstone Project Execution
TECH 39900 Special Topics in Technology III	And	TECH 49900 Special Topics in Technology IV
ENGT 48000 Engineering Technology Capstone I	And	ENGT 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 i 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

Approval Process	Experience
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

Revised 03/14/2020 (effective Fall 2020)

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)