

South Bend Supplemental Information Sheet for Electrical Engineering Technology (EETC) Fall 2019 Plan of Study

BOLD indicates courses offered at the South Bend location

*Indicates approved IUSB course for South Bend location.

ECET Electives (12 hours): ECET Electives can be selected from one or more of the following groups. Please note that **not** all ECET Electives are offered every year and not all ECET Electives are taught at all locations.

Audio ECET 32700 Instrumentation and DAQ Design ECET 33900 Digital Signal Processing ECET 34900 Advanced Digital Systems ECET 38800 Analog IC Applications ECET 42800 Audio Electronics-Selected Topics	ECET 33900 Digital Signal Processing ECET 34900 Advanced Digital Systems ECET 35901 Computer Based DAQ Applications ECET 43900 Advanced Digital Signal Processing	ECET 43600 Elec Power Tran Distrib & Smart Control
Communications ECET 36400 Fundamentals of Electromagnetics ECET 44400 Wireless Systems: Design & Meas ECET 31410 Military RF Electronic Apps	Smart Living ECET 31100 Elec Syst & Signals in Healthcare ECET 32100 Introduction to Nanotechnology ECET 32700 Instrumentation and DAQ Design	Smart Mobility ECET 32300 Intro to Elec Vehicle Systems ECET 33300 Power Electronics in Energy System ECET 37300 Applied Electronic Drives ECET 42301 Elec Vehicle Integr/Fabrication ECET 38501 Intro to Auto Electronics & ECET 38502 (lab)
Computer/Digital ECET 32900 Adv Embedded Digital Systems ECET 33500 Computer Arch & Perform Eval	Smart Environment ECET 30201 Introduction to Industrial Controls ECET 32700 Instrumentation and DAQ Design ECET 37201 Continuous Control Electronics ECET 38600 Bldg Elec Codes & Std Practices	Study Abroad/Professional Practice ECET Co-op Sessions 4 and 5

Advanced Analysis Selectives (3 hours)

ECET 33700 Analog Signal Processing

ECET 33900 Digital Signal Processing

ECET Senior Capstone I and II Selectives (6 hours): Select one pair of Senior Capstone I and II Selectives

ECET 43000 Electrical and Electronic Product and Program Management **and ECET 46000** Project Design and Development

ECET 43100 International Capstone Plan **and** ECET 46100 International Capstone Project Execution

ENGT 40500 Entrepreneurial Capstone I **and** ENGT 40600 Entrepreneurial Capstone II

Technical Selectives (9 hours)

- **ECET:** ECET 29900 and other lab assistant courses is limited to 3 credit hours.
- **College of Engineering:** ME 29700 and Engineering Projects in Community Service (EPICS) are each limited to 3 credit hours. First-Year Engineering (ENGR) courses cannot be used.
- **Purdue Polytechnic Institute:** CNIT 13600 & CNIT 15501 cannot be used.
- **College of Science:** Additional lab-based physics (PHYS), chemistry (CHM) and biology (BIOL) courses; Computer Science (CS) courses; and higher-level mathematics (MA) courses: MA 26100, MA 26500 and MA 26600. CS 11000, CS 15800, CS 15900, and CS 23500 cannot be used.
- **College of Liberal Arts:** Up to 9 hours of THTR 25300, THTR 35300, THTR 55300, FVS 26100, FVS 33200, FVS 33700, or FVS 33800.
- ECET Co-op sessions 1, 2, &3 with seminar.
- ECET 49900 Electrical Engineering Technology – Sust Engy Tech: Intl Perspectv Purdue In Germany

Freshman Speech Selective (3 hours)

COM 11400 Fundamentals of Speech Communication OR * **SPCH-S 121 Public Speaking (IUSB)**

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

Written Communication Selective (3 hours)

ENGL 20500 Introduction to Creative Writing

ENGL 30400 Advanced Composition

ENGL 42000 Business Writing

ENGL 42400 Writing for High Technology Industries

ENGL 42100 Technical Writing

***ENG-W 203 Creative Writing (IUSB)**

***ENG-W 231 Prof. Writing Skills (IUSB)**

***ENG-W232 Intro to Business Writing (IUSB)**

Oral communication Selective (3 hours): Any communication (COM) or ***SPCH-S courses (IUSB)** course at the 20000 level or higher.

English Composition Selective (3 hours)

- ENGL 10600 First-Year Composition or ***ENG-W 131 Reading, Writing, & Inquiry (IUSB)**
- ENGL 10800 Accelerated First-Year Composition
- SCLA 10100 Transformative Texts, Critical Thinking and Communication I: Antiquity to Modernity

Business Selective (3 hours)

- Any Agricultural Economics course (AGEC) at the 20000-level or higher.
- Any Economics (ECON) course at the 20000- level or higher.
- Any Entrepreneurship (ENTR) course at the 20000-level or higher.
- Any Management (MGMT) course at the 20000-level or higher or ***BUS-A 201 Intro to Financial Accounting (IUSB); BUS-L 201 Legal Environment of Business (IUSB)**
- Or select one of the following courses:

AGEC 20300 Int to Microecon for Food & Agribus (BSS)
AGEC 20400 Intro to Resource Economics and Environmental Policy (BSS)
AGEC 21700 Economics (BSS)
AGEC 25000 The Economic Geography of World Food and Resources (BSS)
CSR 34200 Personal Finance
ECON 21000 Principles of Economics (BSS)
ECON 25100 Microeconomics (BSS)
ECON 25200 Macroeconomics (BSS)
***ECON-E 103 Microeconomics (IUSB) (BSS)**
***ECON-E 104 Microeconomics (IUSB) (BSS)**
IT 10400 Industrial Organizations
IT 23000 Industrial Supply Chain Mgmt

IT 33000 Industrial Sales & Sales Mgmt
IT 33200 Purchasing, Inventory & Warehouse
OLS 25200 Human Relations in Org
OLS 27400 Applied Leadership
OLS 28400 Leadership Principles
OLS 32500 Meeting Management
TLI 11100 Intro to Manufacturing & Supply Chain Systems
TLI 11200 Found of Organizational Leadership
TLI 21300 Project Management
TLI 21400 Intro to Supply Chain Management Tech
TLI 34200 Warehouse And Inventory Management
TLI 34250 Purchasing and Contract Mgmt
TLI 34300 Technical & Service Selling

General Education Selectives (12 hours)

Select 12 hours in one or more of the subject areas (disciplines) listed below, subject to the following conditions:

- One course must be from the UCC approved list of Human Culture: Humanities (see below)
- One course must be from the UCC approved list of Human Culture: Behavioral/Social Sciences, unless the student selects a Business Selective, which meets the Human Culture: Behavioral/Social Sciences requirement for core.

Human Culture: Humanities Selective (3 hours)

(<http://www.purdue.edu/provost/initiatives/curriculum/course.html>).

Students attending the South Bend location can go to the following link to review how IU courses transfer to Purdue University to meet Core Course Requirements:

<http://www.purdue.edu/provost/initiatives/curriculum/documents/Retro%20and%20Transfer%20Credit%20Course%20list%205-27-14.pdf>

***HIST-H 105 American History I**

***HIST-H 106 American History II**

***HIST-H 113 History of Western Civilization 1**

***HIST-H 114 History of Western Civilization 2**

***MUS-M 17400 Music for the Listener**

***PHIL-P 110 Introduction to Philosophy**

Human Culture: Behavior/Social Sciences Selective (3 hours)

(<http://www.purdue.edu/provost/initiatives/curriculum/course.html>), unless the student has selected a course indicated with a BSS to satisfy the Business Selective requirement.

Students attending the South Bend location can go to the following link to review how IU courses transfer to Purdue University to meet Core Course Requirements:

<http://www.purdue.edu/provost/initiatives/curriculum/documents/Retro%20and%20Transfer%20Credit%20Course%20list%205-27-14.pdf>

***ECON-E 103 Introduction to Microeconomics**

***ECON-E 104 Introduction to Macroeconomics**

***POLS-Y 103 Introduction to American Politics**

***POLS-Y 109 Introduction to International Relations**

***PSY-P 103 Introduction to Psychology**

***SOC-S 161 Principles of Sociology**

***SOC-S 163 Social Problems**

Foreign languages (except for courses in a student's native language)

African American Studies (AAS)

Art and Design (AD),

American Studies (AMST)

Anthropology (ANTH)

Asian American Studies (ASAM)
 American Sign Language (ASL)
 Bands (BAND)
 Classics (CLCS)
 Comparative Literature (CMPL)
 Communication (COM)

English (ENGL) or ENG-W (IUSB)

History (HIST)
 Interdisciplinary Studies (IDIS)
 Linguistics (LING)
 Music History and Theory (MUS)
Philosophy (PHIL)
Political Science (POL)

Psychology (PSY)

Religious Studies (REL)
Sociology (SOC)
 Theater (THTR)
Women's Studies (WOST)
 ROTC (AFT, MILT, NS)

Industrial Economics Selective (3 hours)

- IT 45000 Production Cost Analysis
- IET 45100 Monetary Analysis for Industrial Decisions
- **TLI 33400 Economic Analysis for Technology Systems**

Minor: Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirements. A minor is not required.

Intercultural Requirement – ALL students must complete

Polytechnic Minimum Global Requirements	
STEP 1:	Complete the Pre-test Intercultural Development Inventory Assessments (1 st year)
STEP 2:	Complete one (1) of the following global experiences:* <ul style="list-style-type: none"> • 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 (4 th year)
	NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to complete their Polytechnic Plan of Study are exempt from Steps 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.

Purdue University (West Lafayette) courses that meet the global requirement

AAS 27100 Intro to African American Studies
 AAS 37300 Variable Title: History of Injustice
 AGR 20100 Communication Across Cultures
 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 Intro to Asian American Studies
 AT 23300 Ethics and Aviation
 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 & Social Image

COM 41200 Theories of Human interaction
 COM 42300 Leadership, Communication & Organizations
 ECET 29000 International Experience
 ECET 38001 Global Professional Issues in ET
 EDPS 23500 Learning and Motivation
 EDPS 30000 Student Leadership Development
 EDPS 30100 Peer Counselling Training
 EDPS 31500 Collaborative Leadership: Listening
 EDPS 31600 Collab Leadership: Cross-cultural Settings
 EDPS 31700 Collaborative Leadership: Mentoring
 ENGL 41400 Literature & Culture
 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 & N. Africa
 HTM 37000 Sustainable Tourism and Responsible Travel
 HTM 37200 Global Tourism Geography
 MSL 20100 Individual Leadership Studies
 OLS 35000 Creativity In Business & Industry
 PHIL 11400 Global Moral Issues
 PHIL 43500 Philosophy of Mind
 POL 222 Women, Politics & Public Policy
 POL 23500 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 Variable Title: It's a Complex World (Cross listed with IE49000, ME29700)
 POL 43300 International Organization
 PSY 12000 Elementary Psychology
 PSY 25100 Health Psychology
 PSY 32200 Research Design
 SOC 10000 Intro to Sociology
 SOC 31000 Racial and Ethnic Diversity
 SOC 33900 Intro to Sociology of Developing Nations
TECH 33000 Technology and the Global Society
TLI 11200 Foundations of Tech Leadership
TLI 31400 Leading Innovation in Organizations
 WGSS 28200 Intro to LGBT Studies
 WGSS 38000 Gender and Multiculturalism
 WGSS 38300 Women and Work

Any foreign language 200 or higher (201, 202, 301, 302, 401, 402)

Polytechnic Statewide- South Bend (IUSB) Approved Courses

South Bend- Offered through IUSB

ANTH-E Indians of Indiana
 ANTH-E 105 Culture & Society
 ANTH-E 300 Culture Areas & Ethnic Groups
 ANTH-E 310 Introduction to Cultures of Africa
 ANTH-E 321 Peoples of Mexico
 ANTH-E 335 Ancient Civilization of Mesoamerica
 ANTH-E 397 Peoples & Cultures of the Middle East
 EALC-J 101 Elementary Japanese I
 GEOG-110 Introduction to Human Geography
 GEOG-G 120 Regions of the World
 GEOG-G 201 World Regional Geography
 HIST-A 371 History of Indiana I
 HIST-A 372 History of Indiana II
 HIST-A 301 Colonial America
 HIST-A 373 American History Through Film
 HIST-A 355 African American History I
 HIST-B 300 Issues in Western European History
 HIST-B 378 History of Germany Since 1648 II
 HIST-C 386 Greek History from the Minoans to Alexander
 HIST-D 310 Russian Revolution and Soviet Regime
 HIST-F 300 Issues in Latin American History
 HIST-A 352 History of Latinos in the United States
 HIST-G 358 Early Modern Japan
 HIST-H 101 The World in the Twentieth Century I
 HIST-H 201 History of Russia I
 HIST-H 202 History of Russia II
 HIST-H 207 Modern East Asian Civilization

HIST-H 211 Latin American Culture and Civilization 1
 HIST-H 212 Latin American Culture and Civilization 2
 HIST-W 300 Issues in World History
 LSTU-L 330 Global Comparisons: Labor Relations – Examples from Three Continents
 LSTU-L 331 Global Problems: Local Solutions
 LSTU-L 385 Class, Race Gender, and Work
 PHIL-P 102 Critical Thinking and Applied Ethics
 PHIL-P 105 Critical Thinking
 PHIL-P 140 Introduction to Ethics
 POLS-Y 107 Introduction to Comparative Politics
 POLS-Y 109 Introduction to International Relations
 POLS-Y 343 The Politics of International Development
 PSY-P 103 Introduction to Psychology
 PSY-P 327 The Psychology of Motivation
 PSY-P 391 Psychology of Gender and Ethnicity
 REL-R 152 Jews, Christians, Muslims
 REL-R 153 Religions of Asia
 SOC-S 163 Social Problems
 REL-R 257 Introduction to Islam
 REL-R 354 Buddhism
 SOC-S 161 Principles of Sociology
 SOC-S 335 Race and Ethnic Relations
 SPAN-S 101 Elementary Spanish I
 SPCH-B 399 Human Behavior and Social Institutions
 SPCH-S 324 Persuasive Speaking
 SPCH-S 427 Cross Cultural Communication

Professional Requirement – All students must complete

Completing the Professional Experience Requirement: All students must complete an acceptable professional experience. 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, or by other possible means. Approval is automatic for certain experiences, while additional experiences may also satisfy this graduation requirement with advisor or faculty approval (see below). Requests for faculty approval must 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	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.

Upper-level courses: At least 32 hours of upper level (300 level or higher) must be completed at Purdue University; ECET Senior Capstone I and II Selectives and at least 12 hours of ECET Electives must be completed at the Purdue University location conferring the degree.

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
ENGT 18000 Engineering Technology Foundations	3				ECET 17700 DAQ & Systems Control (P: ENGT 1800 & ENGT 18100)	3			
ENGT 18100 Engineering Technology Applications	1				ECET 17900 Intro to Digital Systems (P: ENGT 18000/18100 and CNIT 10500/CSCI-C 101)				
English Composition Selective*+	3				MA 16010 Applied Calculus I*(P: ALEKS Score of 75%)	3			
CNIT 10500 Intro to C Programming – CSCI-C 101 Computer Program I (IUSB)	3				General Education Human Cultures Selective*+	3			
Freshmen Speech Selective*+	3				PHYS 22000 General Physics* - PHYS-P 221 or 201 (IUSB)	5			
TECH 12000 Design Thinking in Tech.*	3								
TOTAL CREDIT HOURS	16				TOTAL CREDIT HOURS	17			

Fall 2 nd Year	CR	GR	Sem	Fulfilled by	Spring 2 nd Year	CR	GR	Sem	Fulfilled by
MA 16020 Applied Calculus II (P: MA 16010 with grade of C-or better)	3				ECET 27000 Electronics Prototype Dev/Const (P: ECET 17900, ECET 22700, and ECET 22900)	3			
ECET 22700 DC & Pulse Electronics (P: ECET 17700 and MA 16010)	3				ECET 27400 Wireless Communications (P: ECET 22700, ECET 27000 (may be taken concurrently) and PHYS 22100)	3			
ECET 22900 Concurrent Digital Systems (P: ENGT 18000/ENGT 18100)	3				ECET 27700 AC & Power Electronics♦ (P: ECET 17700 and MA 16010)	3			
PHYS 22100 General Physics* (P: PHYS 22200) - PHYS-P 222 or 202 (IUSB)	5				Technical Selective	3			
Oral Communication Selective+	3				General Education Behavioral/Social Sciences Selective**+	3			
TOTAL CREDIT HOURS	17				TOTAL CREDIT HOURS	15			

Fall 3 rd Year	CR	GR	Sem	Fulfilled by	Spring 3 rd Year	CR	GR	Sem	Fulfilled by
ECET Elective	3				ECET Elective	3			
ECET Advanced Analysis Selective	3				STAT 22500 Intro to Probability Methods or STAT 30100 Elementary Statistical Methods	3			
Industrial Economics Selective	3				ECET 37600 Modern Energy Systems (P: ECET 27700 and PHYS 21800)	3			
Written Communication Selective+	3				ECET 38001 Global Prof Issues in ET)	3			
Business Selective**	3				ECET 27900 Embedded Digital Systems♦ (P: ECET 17900)	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 I Selective	3				Senior Capstone II Selective (P: Senior Capstone Selective I)	3			
ECET Elective	3				ECET Elective	3			
General Education Selective+	3				Free Elective+	3			
Technical Selective	3				General Education Selective+	3			
Technical Selective	3				Intercultural Requirement	0			
					Professional Requirement	0			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	12			

Refer to the Supplemental Information Sheet for Electrical Engineering Technology 2019 Plan of Study sheet for a complete list of selectives and requirements.

*Fulfills University Core Curriculum requirement.

**Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.

♦This course is considered critical. A critical course is one that a student must be able to pass to persist and succeed in a particular major.

+ The options for this selective include at least one course that will also satisfy Cornerstone Certificate requirements.

1. A 2.0 Graduation GPA are required for the Bachelor of Science degree.
2. Students must earn a "D-" or better in all courses. Pass/No Pass grading allowed for General Education Selectives & Free Electives (up to 15 hrs)
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. Senior Capstone Selective I/II and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.
5. 32 credit hours of 300-level or higher courses must be completed at Purdue University.
6. Intercultural & Professional Requirements (ungraded) must be completed. Professional & Intercultural requirements will be satisfied by completion of experiences, assessments, and courses that are pre-approved by the EET Curriculum Subcommittee. Approved courses may fulfill other degree requirements.

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.