PURDUE UNIVERSITY

School of Engineering Technology –Polytechnic Kokomo
Electrical Engineering Technology (EETC) Major
In the Electrical Engineering Technology Program

EETC-BS Suggested Arrangement of Courses

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
ENGT 18000 Engr Tech Foundations (Pre-req: ALEKS 60 or SAT-M 570 or ACT-M 24 or MA 15300 or higher)	3			ECET 17700 DAQ & Systems Control (Prereq: ENGT 18000 and ENGT 18100)	3		
ENGT 18100 Engr Tech Applications (Prereq or concurrent co-req: ENGT 18000)	1			ECET 17900 Intro to Digital Systems (Prereq: ENGT 18000, ENGT 18100 and CNIT 10500)	3		
CNIT 10500 Intro to C Programming	3						
MA 16010 Applied Calculus I*(Pre-req: ALEKS 75 or SAT-M 620 or ACT-M 26 or MA 15800 with minimum grade of C-)	3			MA 16020 Applied Calculus II (Prereq: MA 16010 with minimum grade of C-)	3		
TECH 12000 Design Thinking in Tech*	3			General Education Selective*	3		
English Composition Selective*+	3			Freshman Speech Selective*+	3		
TOTAL CREDIT HOURS	**16**			**TOTAL CREDIT HOURS**	**15**		

Fall 2nd Year	CR	GR	Fulfilled by	Spring 2nd Year	CR	GR	Fulfilled by
ECET 22700 DC & Pulse Electronics^CC (Prereq: ECET 17700 and MA 16010)	3			ECET 27000 Electronics Prototype Dev/Const (Prereq: ECET 17900; ECET 22700; and either ECET 22900 or ECET 27900)	3		
ECET 22900 Concurrent Digital Systems (Prereq: ENGT 18000/ENGT 18100)	3			ECET 27400 Wireless Communications (Prereq: ECET 22700 and MA 16010)	3		
PHYS 22000 General Physics I*	4			ECET 27700 AC & Power Electronics (Prereq: ECET 17700) *or* ECET 27900 Embedded Digital Sys^CC (Prereq: ECET 17900)	3		
General Education Selective*+	3			Physics 22100 General Physics II* (Prereq: Physics 22000)	4		
Written Communication Selective+	3			Oral Communication Selective+	3		
TOTAL CREDIT HOURS	**16**			**TOTAL CREDIT HOURS**	**16**		

Fall 3rd Year	CR	GR	Fulfilled by	Spring 3rd Year	CR	GR	Fulfilled by
ECET 37600 Electrical Energy Systems (Prereq: ECET 27700 and PHYS 22000)	3			ECET 27700 AC & Power Electronics (Prereq: ECET 17700) *or* ECET 27900 Embedded Digital Sys ^CC (Prereq: ECET 17900)	3		
Advanced Analysis Selective *or* ECET Selective	3			Advanced Analysis Selective *or* ECET Selective	3		
ECET 33700 Contin. Syst Anlys & Design (Prereq: ECET 27700 and MA 16020) *or* ECET 33900 Digital Signal Processing (Prereq: ECET 27900 and MA 16020	3			ECET 38001 Global Prof Issues in ET (Prereq: Junior Classification or higher)	3		
Industrial Economics Selective*	3			Business Selective**	3		
STAT 22500 Intro Prob Models (Prereq MA 16010) *or* STAT 30100 Elem Statistical Methods	3			Technical Selective	3		
TOTAL CREDIT HOURS	**15**			**TOTAL CREDIT HOURS**	**15**		

Fall 4th Year	CR	GR	Fulfilled by	Spring 4th Year	CR	GR	Fulfilled by
Senior Capstone Selective I (Prereq: ECET 27000, ECET 38001, and 6 CR of ECET Selectives)	3			Senior Capstone Selective II (Prereq: Senior Capstone Selective I)	3		
ECET Selective	3			ECET Selective	3		
General Education Selective+	3			General Education Selective+	3		
Technical Selective	3			Free Elective	3		
Technical Selective	3			Professional and Intercultural Requirements	0		
TOTAL CREDIT HOURS	**15**			**TOTAL CREDIT HOURS**	**12**		

Refer to the **Supplemental Information Sheet for the Electrical Engineering Technology Major in the Electrical Engineering Technology Program Fall 2020 Plan of Study** 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. ^CC Course is identified as a Critical Course by the faculty. + Can be selected to meet a Cornerstone requirement.

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. Pass/no pass grading allowed for General Education Selectives and Free Elective (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. At least one Advanced Analysis Selective (ECET 33700 or ECET 33900) must be completed.
5. Senior Capstone Selective I/II and 12 hours of ECET Selectives must be taken at Purdue University.
6. 32 credit hours of 300-level or higher courses must be completed at Purdue University.
7. Complete the Professional Requirement (ungraded) □. Complete the Intercultural Requirement (ungraded) □.

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The student is ultimately responsible for knowing and completing all degree requirements.
myPurduePlan is the knowledge source for specific requirements and completion.   Updated 06/01/2020

ECET Selectives (12 hours): Please note that not all ECET Selectives are offered every year and not all ECET Selectives are taught at all locations.

ECET 30201 Introduction to Industrial Controls	ECET 33500 Computer Arch & Perform Eval	ECET 38600 Bldg Elec Codes & Std Practices
ECET 31100 Elec Syst & Signals in Healthcare	ECET 33700 Continuous Systems Analysis & Desn	ECET 38800 Analog IC Applications
ECET 31410 Military RF Electronic Applications	ECET 33900 Digital Signal Processing	ECET 42301 Elec Vehicle Integr/Fabrication
ECET 31800 Foundations of Audio Electronics	ECET 34900 Advanced Digital Systems	ECET 42800 Audio Electronics-Selected Topics
ECET 32100 Introduction to Nanotechnology	ECET 35901 Computer Based DAQ Applications	ECET 43600 Elec Power Tran Distrib & Smart Control
ECET 32300 Intro to Electric Vehicle Systems	ECET 36400 Fundamentals of Electromagnetics	
ECET 32700 Instrumentation and DAQ Design	ECET 36900 Applied Computer Vision	ECET 43900 Advanced Digital Signal Processing
ECET 32900 Adv Embedded Digital Systems	ECET 37201 Continuous Control Electronics	ECET 44400 Wireless Systems: Design & Meas
ECET 33300 Power Electronics in Energy Systems	ECET 37300 Applied Electronic Drives	ECET Co-op Sessions 4 and 5

Advanced Analysis Selective (3 hours): ECET 33700 Continuous Systems Analysis & Design or ECET 33900 Digital Signal Processing. Offerings of Advanced Analysis Selectives will vary by semester and location.

ECET Senior Capstone Selectives I and II (6 hours): Senior Capstone Selectives I and II must be taken in consecutive semesters to count toward degree requirements. Select one pair of Senior Capstone Selectives I and II:
- ECET 43000 Product/Project Management *and* ECET 46000 Project Design and Development
- ECET 43100 International Capstone Plan *and* ECET 46100 International Capstone Project Execution
- ENGT 48000 Engineering Technology Capstone I *and* ENGT 48100 Engineering Technology Capstone II

Technical Selectives (9 hours) from the following departments and Colleges. Limitations in courses or areas are noted below.
- **ECET**: ECET 29900 is limited to 3 credit hours.
- **College of Engineering**: ME 29700 and EPICS courses are each limited to 3 credit hours. First-Year Engineering (ENGR) courses cannot be used.
- **Purdue Polytechnic Institute**: **MET, CGT, TLI, OLS, IT.** CNIT 13600 and 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 23500, CS 15800 and CS 15900 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.

English Composition Selective:	**Written Communication Selective**	**Industrial Economics Selective**	**Oral Communication Selective**
ENGL 10600 First-Year Compositon *or*	ENGL 20500 Creative Writing *or*	AGEC 33000 Mgmt Methods for Agricultural Sys	(3 hours)
ENGL 10800 Accel First-Year Comp *or*	ENGL 30400 Adv. Composition *or*	AGEC 35200 Quantitative Techniques for Firm Decision Making	Any communication (COM) course at the 200 level or higher
SCLA 10100 Crit Thinking and Com I	ENGL 42000 Business Writing *or*		
	ENGL 42100 Technical Writing *or*		
Freshman Speech Selective	ENGL 42400 Writ for High-Tech Ind	**IET 33400 Econ Analysis of Tech Sys**	**Statistics Selective**
COM 11400 Fund of Speech Com *or*		**MGMT 20000 Intro Accounting**	STAT 22500 Intro Prob Models
SCLA 10200 Crit Thinking and Com II		MGMT 21200 Business Accounting	STAT 30100 Elem Stat Methods

Business Selective and General Education Selective: Either the Business Selective or the General Education Selective must be selected from the UCC approved list of courses for Human Culture: Behavior/Social Sciences (http://www.purdue.edu/provost/initiatives/curriculum/course.html).

Business Selective (3 hours): Select one of the following (courses that satisfy the UCC Human Cultures Behavior/Social Sciences (BSS) requirement are marked BSS).
- Any Agricultural Economics course (AGEC) at the 200-level or higher: AGEC 20000 or higher.
- Any Economics (ECON) course at the 200-level or higher: ECON 20000 or higher.
- Any Entrepreneurship (ENTR) course at the 200-level or higher: ENTR 20000 or higher.
- Any Management (MGMT) course at the 200-level or higher: MGMT 20000 or higher.
- Or select one of the following courses:

AGEC 20300 Intro Microecon for Food & Agribus (BSS)	ECON 21000 Prin of Economics (BSS)	OLS 28400 Leadership Principles	**IET 21400 Intro to Supply Chain Mgmt Tech**
AGEC 20400 Resource Econ & Environ Pol (BSS)	ECON 25100 Microeconomics (BSS)	OLS 32500 Meeting Management	IET 34200 Warehouse and Inventory Mgmt
	ECON 25200 Macroecon (BSS)	**TLI 11200 Foundations of Org Leadership**	
AGEC 21700 Economics (BSS)	CSR 34200 Personal Finance	**TLI 15200 Business Prin for Org Leadership**	**IET 34300 Technical and Service Selling**
AGEC 25000 Econ Geog of World Food and Resources (BSS)	**OLS 25200 Human Relations in Org**	**TLI 21300 Project Management**	**IET 34250 Purch and Contract Mgmt**
	OLS 27400 Applied Leadership		

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 list of Human Cultures: Humanities.
- Only one of AGEC 21700 and ECON 21000 can be applied to the EETC Plan of Study.
- The General Education Selectives must be selected from the following subject areas (disciplines):

African Amer Studies (AAS)	Classics (CLCS)	History (HIST)	Religious Studies (REL)
Art and Design (AD),	Comparative Lit (CMPL)	Interdisciplinary Studies (IDIS)	Sociology (SOC)
American Studies (AMST)	Communication (COM)	Linguistics (LING)	Theater (THTR)
Anthropology (ANTH)	Economics (ECON)	Music History & Theory (MUS)	Women's Studies (WGSS
Asian Amer Studies (ASAM)	English (ENGL)	Philosophy (PHIL)	ROTC (AFT, MSL, NS)
American Sign Language (ASL)	Foreign Languages (except for courses	Political Science (POL)	
Bands (BAND)	in a student's native language)	Psychology (PSY)	

Free Elective (3 hours). Any non-remedial course(s).

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

Minors: Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirements. A minor is not required. The Electrical Engineering Technology Minor cannot be added to this major.

Double majors: Within the PIECET-BS Program, double majors between AUET and CEGT and/or ENET are allowed without restriction. A double major with EETC requires an additional 12 credit hours of ECET courses. The additional courses will fulfil the EETC major for the purposes of double majors. The additional courses have the following restrictions:
- No 100-level courses may be used.
- Only three (3) credits of a 200-level course may be used, excluding: ECET 22400 Electronics Systems, ECET 29000 International Experience and ECET 29900 Selected EET Subjects, which may not be used.
- All additional courses must be taken on the PWL and/or PSW campuses.

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.

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

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 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.

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 Intro 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 Engr Tech
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 & 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 Intro To The Sociology Of Devel 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)