# Kokomo Supplemental Information for Electrical Engineering Technology (EETC) Fall 2019 Plan of Study

## Bold indicates courses offered at the Kokomo Campus. See Student Services Coordinator for course availability.

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

Audio ECET 33700 Continuous Syst Analysis & Design ECET 33900 Digital Signal Processing ECET 34900 Advanced Digital Systems ECET 38800 Analog IC Applications ECET 42800 Audio Electronics-Selected Topics

### Communications

ECET 31410 Military RF Applications ECET 36400 Fundamentals of Electromagnetics ECET 44400 Wireless Systems: Design & Meas *Computer/Digital* ECET 32900 Adv Embedded Digital Systems ECET 33500 Computer Arch & Perform Eval ECET 33900 Digital Signal Processing ECET 34900 Advanced Digital Systems ECET 35901 Computer Based DAQ Applications ECET 43900 Advanced Digital Signal Processing

### Smart Living

ECET 31100 Elec Syst & Signals in Healthcare ECET 32100 Introduction to Nanotechnology ECET 32700 Instrumentation and DAQ Design

#### 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 ECET 43600 Elec Power Tran Distrib & Smart Control

### 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

Study Abroad/Professional Practice ECET Co-op Sessions 4 and 5

Advanced Analysis Selective (3 hours): ECET 33700 Continuous Systems Analysis & Design or ECET 33900 Digital Signal Processing.

- ECET Senior Capstone Selectives I and II (6 hours): 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 40500 Entrepreneurial Capstone I and ENGT 40600 Entrepreneurial 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 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 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.
- ECET 49900 Electrical Engineering Technology Sust Engy Tech: Intl Perspectv Purdue In Germany

## English Composition Selective (3 hours)

ENGL 10600 First-Year Composition ENGL 108 Accelerated First-Year Composition SCLA 101 transformative Texts, Critical Thinking and Communication I: Antiquity To Modernity ENG-W131

### Freshman Speech Selective (3 hours)

COM 11400 Fundamentals Of Speech Communication 3.00 SCLA 10200 Transformative Texts, Critical Thinking And Communication II: Modern World SPCH-S121

#### Written Communication Selective (3 hours)

ENGL 20500 Creative Writing ENGL 30400 Adv. Composition ENGL 42000 Business Writing ENGL 42100 Technical Writing ENGL 42400 Writing For High Technology Industries ENG-W321 ENG-W231

Oral Communication Selective (3 hours): Any communications (COM) course at the 200 level or higher. SPCH-C321, SPCH-C325, SPCH-C380, SPCH-S223, or SPCH-S229

Industrial Economics Selective (3 hours) IET 45000 Production Cost Analysis IET 45100 Monetary Analysis For Industrial Decisions TLI 33400 Economic Analysis For Technology Systems 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
- Any Management (MGMT) course at the 200-level or higher
- Or select one of the following courses:

AGEC 20300 Intro Microecon for Food & Agribus (BSS)	IT 10400 Industrial Organizations
AGEC 20400 Resource Econ & Environ Pol (BSS)	IT 23000 Industrial Supply Chain Mgmt
AGEC 21700 Economics (BSS)	IT 33000 Industrial Sales & Sales Mgmt
AGEC 25000 Econ Geography of World Food and	IT 33200 Purchasing, Inventory & Warehouse
Resources (BSS)	OLS 25200 Human Relations in Org
ECON 21000 Principles of Economics (BSS)	OLS 27400 Applied Leadership
ECON 25100 Microeconomics (BSS)	OLS 28400 Leadership Principles
ECON 25200 Macroeconomics (BSS)	OLS 32500 Meeting Management
CSR 34200 Personal Finance	TLI 11100 Gateway to TLI

TLI 11200 Foundations of Org Leadership TLI 21300 Project Management TLI 21400 Ind. Supply Chain Mgmt Tech TLI 34200 Warehouse and Inventory Mgmt TLI 34250 Purchasing and Contract Mgmt TLI 34300 Technical and Service Selling BUS-F260 Personal Finance

General Education Selectives (12 hours). Select 12 hours in one or more of the subject areas (discipline) listed below, subject to the following constraints:

- One course must be from the UCC approved list of Human Culture: Humanities <u>http://www.purdue.edu/provost/initiatives/curriculum/course.html</u>).
  - ENG-L204, 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
- One course must be from the UCC approved list of Human Culture: Behavior/Social Sciences
- ANTH-A104, ECON-E201, ECON-E202, POLS-Y103, PSY-P103, SOC-S100

• (http://www.purdue.edu/provost/initiatives/curriculum/course.html), unless the student has selected a course on the BSS list for the Business Selective.

Within this framework, the student must select courses from the following subject areas: Foreign languages (except for courses in a student's native language) African American Studies (AAS) Bands (BAND) Interdisciplinary Studies (IDIS) Religious Studies (REL) Art and Design (AD), Classics (CLCS) Linguistics (LING) Sociology (SOC) Music History and Theory (MUS) American Studies (AMST) Comparative Literature (CMPL) Theater (THTR) Anthropology (ANTH) Communication (COM) Philosophy (PHIL) Women's Studies (WGSS) Asian American Studies (ASAM) Political Science (POL) ROTC (AFT, MILT, NS) English (ENGL) American Sign Language (ASL) History (HIST) Psychology (PSY)

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

**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.

### 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.

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					

### **Approved Professional Requirement Experiences**

\* 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	HIST 46900	Black Civil Rights Movement
AAS 37300	Variable Title: History of Injustice	HIST 47900	American Representations of Middle East
AGR 20100	Communication Across Cultures		& North Africa
ANSC 38100	Leadership for a Diverse workplace	HIST 49900	History of Sexual Regulation in the United
ANTH 20300	Biological Bases of Human Social Behavior		States
ANTH 20500	Human cultural Diversity	HTM 37000	Sustainable Tourism and Responsible
ANTH 21000	Technology and Culture		Travel
ANTH 21200	Culture, Food and Health	HTM 37200:	Global Tourism Geography
ANTH 23000	Gender Across Cultures	MSL 20100	Individual Leadership Studies
ANTH 34000	Global Perspectives on Health	OLS 35000	Creativity In Business & Industry
ANTH 34100	Culture and Personality	PHIL 11400	Global Moral Issues
ANTH 37900	Native American Cultures	PHIL 43500	Philosophy of Mind
ARAB 28000	Arabic culture	POL 22200	Women, Politics & Public Policy
ASAM 24000	Intro to Asian American Studies	POL 23500	Rich and Poor Nations
AT 23300	Ethics and Aviation	POL 32600	Black Political Participation in America
COM 22400	Communicating in the Global Workplace	POL 32700	Global Green Politics
COM 30300	Intercultural Communication	POL 36000	Women and the Law
COM 32000	Small Group Communication	POL 41300	The Human Basis of Politics
COM 37300	Self-Presentation & Social Image	POL 42300	International Environmental Policy
COM 38000	Sociolinguistic Study of African American English	POL 42900	Variable Title: It's a Complex World (Cross
COM 38000	Sociolinguistic Study of African American English		listed with IE49000, ME29700)
COM 41200	Theories of Human interaction	POL 43300	International Organization
COM 42300	Leadership, Communication & Organizations	PSY 25000	Psychology of Adjustment
ECET 29000	International Experience	PSY 25100	Health Psychology
ECET 38001	Global Professional Issues in ET	PSY 28500	Consumer Behavior
EDPS 23500	Learning and Motivation	PSY 32200	Research Design
EDPS 30000	Student Leadership Development	SOC 10000	Intro to Sociology
EDPS 30100	Peer Counselling Training	SOC 31000	Racial and Ethnic Diversity
EDPS 31500	Collaborative Leadership: Listening	SOC 33900	Introduction to Sociology of Developing
EDPS 31600	Collaborative Leadership: Cross-cultural Settings		Nations
EDPS 31700	Collaborative Leadership: Mentoring	TECH 33000	Technology and the Global Society
ENGL 41400	Literature & Culture	WGSS 28200	Intro to LGBT Studies
HDFS 23300	Stress and Human Health	WGSS 38000	Gender and Multiculturalism
HDFS 28000	Diversity in Individual and Family Life	WGSS 38300	Women and Work
HDFS 33200	Stress & Coping in Contemporary Families	Any foreign lan	guage 200 or higher (201, 202, 301, 302,
HEBR 38500	The Holocaust in Modern Hebrew Literature		401, 402)
HIST 19500	Historical Research & Film!	PSY-P103	General Psychology
HIST 30000	Eve of Destruction: Global Crises and	SOC-S100	Introduction to Sociology
	World Organization in the 20th Century	SPCH-S229	Discussion and Group Methods
HIST 33805	History of Human Rights	SPCH-S223	Business and Professional
HIST 35000	Science and Society in the 20th-Century		Communication
	World	<b>CNIT 32000</b>	Policy, Regulation, and Globalization in
HIST 36600	Hispanic Heritage of the USA		information Technology
HIST 37700	History & Culture of Native America	TLI 11200	Foundations of Tech. Leadership
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Updated 04/05/2019



Kokomo Major: Electrical Engineering Technology (EETC) School of Engineering Technology Purdue Polytechnic Institute **EETC-BS Suggested Arrangement of Courses** 

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

Fall 1 <sup>st</sup> Year	CR	GR	Fulfilled by	Spring 1 <sup>st</sup> Year	CR	GR	Fulfilled by
ENGT 18000 Eng Tech Foundations	3			ECET 17700 DAQ & Systems Control	3		
ENGT 18100 Eng Tech Applications	1			(Prereq: ENGT 18000 and ENGT 18100)			
English Composition Selective (ENG-W131 or	3			ECET 17900 Intro to Digital Systems			
SCLA 10100)				(Prereq: ENGT 18000/18100 and CNIT 10500)			
CNIT 10500 Intro to C Programming	3			Freshman Speech Selective (SPCH-S121 or SCLA 10200)	3		
MA 16010 Applied Calculus I*	3			MA 16020 Applied Calculus II	3		
(Prereq: ALEKS Score of 75%)				(Prereq: MA 16010 with grade of C-or better)			
TECH 12000 Design Thinking in Tech.*	3			General Education Selective*	3		
TOTAL CREDIT HOURS	16			TOTAL CREDIT HOURS	15		
	1				1	1	
Fall 2 <sup>nd</sup> Year	CR	GR	Fulfilled by	Spring 2 <sup>nd</sup> Year	CR	GR	Fulfilled by
ECET 22700 DC & Pulse Electronics <sup>CC</sup> (Prereq: ECET 17700 and MA 16010)	3			ECET 27000 Electronics Prototype Dev/Const (Prereq: ECET 17900, ECET 22700, ECET 22900)	3		
ECET 22900 Concurrent Digital Systems (Prereq: ENGT 18000/ENGT 18100)	3			ECET 27400 Wireless Communications (Prereq: ECET 22700, ECET 27000 (may be taken concurrently) and PHYS 21900)	3		
PHYS 22000 General Physics I* (PHYS-P201 or	4-5			ECET 27700 AC & Power Electronics	3		
PHYS-P221)				(Prereq: ECET 17700 and MA 16010) <i>or</i>			
				ECET 27900 Embedded Digital Sys <sup>CC</sup> (Prereq: ECET 17900)			
General Education Selective**	3			PHYS 21900 General Physics II* (Prereq: PHYS 21800) (PHYS-P202 or P222)	4-5		
Written Communication Selective	3			Oral Communication Selective	3		
TOTAL CREDIT HOURS	16			TOTAL CREDIT HOURS	16		
Fall 3 <sup>rd</sup> Year	CR	GR	Fulfilled by	Spring 3 <sup>rd</sup> Year	CR	GR	Fulfilled by
ECET 33700 Contin. Syst Anlys & Design	3			ECET 27700 AC & Power Electronics	3		
(Prereq: ECET 27700 and MA 16020) <i>or</i>				(Prereq: ECET 17700 and MA 16010) or			
ECET 33900 Digital Signal Processing				ECET 27900 Embedded Digital Sys <sup>CC</sup>			
(Prereq: ECET 27900 and MA 16020)				(Prereq: ECET 17900)			
ECET Selective	3			ECET Selective	3		
ECET 37600 Electrical Energy Systems	3			ECET 38001 Global Prof Issues in ET	3		
(Prereq: ECET 27700 and PHYS 21800)				(Prereq: Junior Class or higher)			
Industrial Economics Selective	3			Business Selective**	3		
STAT 30100 Elem Statistical Methods	3			Technical Selective	3		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	15		

Fall 4 <sup>th</sup> Year	CR	GR	Fulfilled by	Spring 4 <sup>th</sup> Year	CR	GR	Fulfilled by
Senior Capstone Selective I (Prereq: ECET 27000, ECET 38001, 9 CR of ECET Selectives, of which 3 CR can be concurrent)	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			Global / Intercultural Requirement	0	I	
				Professional Requirement	0	I	
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	12		

Refer to the Supplemental Information Sheet for Electrical Engineering Technology Fall 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. <sup>cc</sup> Course is identified as a Critical Course by the faculty.

120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree. 1.

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).

Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts. 3.

4. Senior Capstone Selective I/II and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.

32 credit hours of 300-level or higher courses must be completed at Purdue University. 5.

Complete the Global / Intercultural Requirement (ungraded) 
.Complete the Professional Requirement (ungraded) . 6.

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