

**Departmental/Program Major Courses (120 credits)**

**Required Major Courses (34 credits)**

- \_\_\_\_\_ (3) ENGT 18000 - Engineering Technology Foundations
- \_\_\_\_\_ (1) ENGT 18100 - Engineering Technology Applications
- \_\_\_\_\_ (3) ECET 17700 - Data Acquisition and Systems Control
- \_\_\_\_\_ (3) ECET 17900 - Introduction to Digital Systems
- \_\_\_\_\_ (3) ECET 22700 - DC and Pulse Electronics
- \_\_\_\_\_ (3) ECET 22900 - Concurrent Digital Systems
- \_\_\_\_\_ (3) ECET 27000 - Electronics Prototype Development and Construction
- \_\_\_\_\_ (3) ECET 27400 - Wireless Communications
- \_\_\_\_\_ (3) ECET 27700 - AC and Power Electronics
- \_\_\_\_\_ (3) ECET 27900 - Embedded Digital Systems
- \_\_\_\_\_ (3) ECET 37600 - Electrical Energy Systems
- \_\_\_\_\_ (3) ECET 38001 - Global Professional Issues in ET

**ECET Selectives – Select the following courses by category (15 credits)**

- \_\_\_\_\_ (3) ECET Advanced Analysis Selective (choose from ECET 33700 or ECET 33900)
- \_\_\_\_\_ (12) ECET Selectives (choose from list)

**ECET Senior Capstone Selectives I and II – (6 credits)**

- \_\_\_\_\_ (3) ECET Senior Capstone Selective I (choose from list)
- \_\_\_\_\_ (3) ECET Senior Capstone Selective II (choose from list)

**Other Departmental/Program Course Requirements (65 credits)**

- \_\_\_\_\_ (3) CNIT 10500 - Introduction to C Programming
- \_\_\_\_\_ (3) COM 11400 - Fundamentals of Speech Communication (*satisfies Oral Communication for core*)
- \_\_\_\_\_ (3) MA 16010 - Applied Calculus I (*satisfies Quantitative Reasoning for core*)
- \_\_\_\_\_ (3) MA 16020 - Applied Calculus II
- \_\_\_\_\_ (4) PHYS 21800 - General Physics (*satisfies Science for core*)
- \_\_\_\_\_ (4) PHYS 21900 - General Physics II (*satisfies Science for core*)
- \_\_\_\_\_ (3) TECH 12000 - Design Thinking in Technology (*satisfies Information Literacy and Science, Technology & Society for core*)
- \_\_\_\_\_ (3) TLI 33400 - Economic Analysis of Technical Systems
- \_\_\_\_\_ (3) English Composition Selective (choose from ENGL 10600 or ENGL 10800) (*satisfies Written Communication for core*)
- \_\_\_\_\_ (6) Business Selective and General Education Selective (choose from list, with the requirement that the *Human Cultures: Behavioral/Social Sciences* category for core must be met by either the Business Selective or a General Educ. Selective)
- \_\_\_\_\_ (3) General Education Human Cultures: Humanities Selective (choose from list)
- \_\_\_\_\_ (6) General Education Selectives (choose from list)
- \_\_\_\_\_ (6) Communication Selectives (choose from list)
- \_\_\_\_\_ (3) Statistics Selective (choose from STAT 30100 or STAT 22500)
- \_\_\_\_\_ (9) Technical Selectives (choose from list: 9 additional credit hours of *technical courses*, including additional *ECET courses*)
- \_\_\_\_\_ (3) Free Elective
- \_\_\_\_\_ (0) Global / Intercultural Requirement
- \_\_\_\_\_ (0) Professional Requirement

Choose from list: Refer to the Supplemental Information for Electrical Engineering Technology Fall 2017 Plan of Study sheet for a complete list of selectives and requirements.

**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"/>	_____			

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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.**

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)			
ENGL 10600 First Year Composition* <b>ENG-W131</b>	3			ECET 17900 Intro to Digital Systems	3		
CNIT 10500 Intro to C Programming	3			(Prereq: ENGT 18000/18100 and CNIT 10500)			
MA 16010 Applied Calculus I* (Prereq: ALEKS Score of 75%)	3			COM 11400 Fund of Speech Communication* <b>SPCH-S121</b>	3		
TECH 12000 Design Thinking in Tech.*	3			MA 16020 Applied Calculus II	3		
				(Prereq: MA 16010 with grade of C-or better)			
<b>TOTAL CREDIT HOURS</b>	<b>16</b>			General Education Selective*	3		
				<b>TOTAL CREDIT HOURS</b>	<b>15</b>		

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	3		
ECET 22900 Concurrent Digital Systems (Prereq: ENGT 18000/ENGT 18100)	3			(Prereq: ECET 17900, ECET 22700, ECET 22900)			
PHYS 21800 General Physics I* ( <b>PHYS-P201 or PHYS-P221</b> )	4-5			ECET 27400 Wireless Communications	3		
General Education Selective**	3			(Prereq: ECET 22700, ECET 27000 (may be taken concurrently) and PHYS 21900)			
Communication Selective	3			ECET 27700 AC & Power Electronics	3		
				(Prereq: ECET 17700 and MA 16010) <b>or</b>			
<b>TOTAL CREDIT HOURS</b>	<b>16</b>			ECET 27900 Embedded Digital Sys <sup>CC</sup> (Prereq: ECET 17900)			
				PHYS 21900 General Physics II*	4-5		
				(Prereq: PHYS 21800) ( <b>PHYS-P202 or P222</b> )			
				Communication Selective	3		
				<b>TOTAL CREDIT HOURS</b>	<b>16</b>		

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 (Prereq: ECET 27700 and MA 16020) <b>or</b>	3			ECET 27700 AC & Power Electronics	3		
ECET 33900 Digital Signal Processing (Prereq: ECET 27900 and MA 16020)				(Prereq: ECET 17700 and MA 16010) <b>or</b>			
ECET Selective	3			ECET 27900 Embedded Digital Sys <sup>CC</sup>			
ECET 37600 Electrical Energy Systems (Prereq: ECET 27700 and PHYS 21800)	3			(Prereq: ECET 17900)			
Business Selective**	3			ECET Selective	3		
STAT 30100 Elem Statistical Methods	3			TLI 33400 Economic Analysis For Tech Systems	3		
				(Prereq: MA 16010) <b>IT 45000</b>			
<b>TOTAL CREDIT HOURS</b>	<b>15</b>			ECET 38001 Global Prof Issues in ET	3		
				(Prereq: Junior Class or higher)			
				Technical Selective	3		
				<b>TOTAL CREDIT HOURS</b>	<b>15</b>		

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	—	
				Professional Requirement	0	—	
<b>TOTAL CREDIT HOURS</b>	<b>15</b>			<b>TOTAL CREDIT HOURS</b>	<b>12</b>		

Refer to the **Supplemental Information Sheet for Electrical Engineering Technology Fall 2017 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.
- 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.
- 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 the Purdue location conferring the degree..
- Complete the Global / Intercultural Requirement (ungraded) . Complete the Professional Requirement (ungraded) .

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\*\*\*\*\* Updated 03/31/2017

## Supplemental Information for Electrical Engineering Technology (EETC) Fall 2017 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

ECET 33900 Digital Signal Processing  
ECET 34900 Advanced Digital Systems  
ECET 35901 Computer Based DAQ Applications  
ECET 43900 Advanced Digital Signal Processing

ECET 38600 Bldg Elec Codes & Std Practices  
ECET 43600 Elec Power Tran Distrib & Smart Control

### Communications

ECET 36400 Fundamentals of Electromagnetics  
ECET 44400 Wireless Systems: Design & Meas  
ECET 31410 Military RF Applications

### 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

### 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

### Study Abroad/Professional Practice

ECET 49900 Sustainable Energy Technologies  
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

**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.

**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.
- Or select one of the following courses:

AGEC 20300 Intro Microecon for Food & Agribus (BSS)

AGEC 20400 Resource Econ & Environ Pol (BSS)

AGEC 21700 Economics (BSS)

AGEC 25000 Econ Geography of World Food and Resources (BSS)

ECON 21000 Principles of Economics (BSS)

**ECON 25100 Microeconomics (BSS)**

**ECON 25200 Macroeconomics (BSS)**

CSR 34200 Personal Finance

**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 Gateway to TLI**

**TLI 11200 Foundations of Org Leadership**

**TLI 21300 Project Management**

**TLI 25200 Business Prin for Org Leadership**

**TLI 21400 Ind. Supply Chain Mgmt Tech**

**TLI 34200 Warehouse and Inventory Mgmt**

**TLI 34300 Technical and Service Selling**

**TLI 34250 Purchasing and Contract Mgmt**

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

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)

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 (WGSS)

ROTC (AFT, MILT, NS)

**Communications Selective** (6 hours): Must complete at least one course from each category (oral communication and written communication).

- **Written communication** (3 hours). ENGL 20500 Creative Writing; ENGL 30400 Adv. Composition; ENGL 42000 Business Writing; ENGL 42100 Technical Writing
  - **ENG-W231 or ENG-W321**
- **Oral communication** (3 hours): Any communications (COM) course at the 200 level or higher.
  - **SPCH-C321, SPCH-C325, SPCH-C380, SPCH-S223, or SPCH-S229**

**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.

**Completing the Global/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).

**School of Engineering Technology (Polytechnic) Growth Plan for Global Awareness & Intercultural Competency**

Intercultural Growth Plan	Developmental Level Competency
Assessment	___ Complete the Pre- and Post-Intercultural Development Inventory Assessments (1 <sup>st</sup> year and 4 <sup>th</sup> year) ___ Complete the pre- and post- BEVI (1 <sup>st</sup> and 4 <sup>th</sup> years)
	___ Complete one of the following Intercultural Knowledge and Effectiveness components below: (This list will be reviewed and updated each year) <ul style="list-style-type: none"> <li>• Crosswalk Commons (residential living Experience for a minimum of one semester)</li> <li>• Serve as a BGRI Program leader</li> <li>• PUPIL (Purdue University Passport to Intercultural Learning) (Obtain at least two badges)</li> <li>• Participate in two (2) Boiler Out Program Activities</li> <li>• Participate in Host-a-Boiler</li> </ul>
	___ Complete one of the following: <ul style="list-style-type: none"> <li>• An international project or collaborative project, or</li> <li>• An international internship, or</li> <li>• A Faculty-led Study Abroad program, or</li> <li>• Three credit hours of courses** from the Polytechnic list of approved of recommended Global/Intercultural courses. <i>**Must be in a category other than Increasing Self-awareness</i></li> </ul>

**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.

Potential Professional Experiences

Approval Process	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	Industry-sponsored Senior Capstone
Automatic	EPICS courses, minimum of two
Automatic	Lab Assistant (satisfactory completion of a minimum of one lab division for one term; e.g., ECET 29900 or MET 39200)
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC, reservist, active duty, veteran)
Faculty	Other undergraduate research experiences (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

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