

Electrical Engineering Technology School of Engineering Technology Purdue Polytechnic Institute

Major Code: EETC Program Code: PIECET-BS 120-cr for graduation "D-" or better required in all major courses

Departmental/Program Major Required Major Course	-	ts)											
 •	` _	s Control											
	Acquisition and Systems												
	duction to Digital Systen												
	nd Pulse Electronics ^{CC (Cri}												
	urrent Digital Systems												
	ronics Prototype Develo	opment and Constru	ction										
` '	ess Communications												
(3) ECET 27700 - AC &		C (Critical Course)											
	edded Digital Systems ^{CC}	. (Critical Course)											
	rical Energy Systems												
` '	al Professional Issues in												
	alysis Selective (choose	from ECET 33700 or	r ECET 33900)										
	T Selectives (choose from list)												
 : :	neering Technology Fou												
	neering Technology App												
	selective (choose from li												
•	Selective (choose from I												
Other Departmental/P	rogram Course Requi	irements (62 cred	lits)										
	duction to C Programmi												
(3) COM 11400 - Fund	lamentals of Speech Cor	mmunication (satisf	fies Oral Communication f	or core)									
(3) MA 16010 - Applie	MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)												
(3) MA 16020 - Applie	MA 16020 - Applied Calculus II												
(4) PHYS 21800 - Gene	eral Physics I <i>(satisfies So</i>	Science for core)											
(4) PHYS 21900 - Gene	eral Physics II <i>(satisfies S</i>	Science for core)											
(3) TECH 12000 - Desi	gn Thinking in Technolo	ogy (satisfies Inform	ation Literacy and Science,	. Technology & Society for core	e)								
(3) English Composition	on Selective (choose from	m ENGL 10600 or E	NGL 10800) (satisfies Writ	ten Communication for core)									
(6) Business Selective	and General Education	Selective (choose fr	om list, with the requirem	nent that the <i>Human Cultures</i> .	:								
Behavioral/Social S	Sciences category for co	ore must be met by	either the Business Selecti	ve or a General Educ. Selectiv	/e)								
(3) General Education	Human Cultures: Huma	anities Selective (ch	oose from list)										
(6) General Education	Selectives (choose from	m list)											
(6) Communication Se	electives (choose from li	ist)											
(3) Industrial Econom	ics Selective (choose fro	om IET 45100 or IT 4	5000)										
(3) Statistics Selective	(choose from STAT 301	100 or STAT 22500)											
(9) Technical Selective	es (choose from list: 9 a	additional credit hou	irs of <i>technical courses</i> , in	cluding additional <i>ECET course</i>	es)								
Free Elective - (3 cred	its)												
(3) Free Elective													
Choose from list: Refer to the Su	oplemental Information	Sheet for Electrical	Engineering Technology (EETC) Fall 2016 Plan of Study	for a								
complete list of selectives and rec	quirements.												
University Core Requirements	. 				. — –								
		_		_									
Human Cultures: Behavioral/Social Sciences		S	cience										
Human Cultures: Humanities			cience	Π									
Information Literacy			cience, Technology & Society										
Oral Communication													
Quantitative Reasoning				-									
-													
**********	*******	******	********	*********									
The student is	ultimately responsib	le for knowing an	d completing all degree	e requirements.									
	-	_	ific requirements and c	-									
-	_	-	-	_									
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Major: Electrical Engineering Technology (EETC)

School of Engineering Technology Purdue Polytechnic Institute **EETC-BS Suggested Arrangement of Courses**

Major Code: EETC Program Code: PIECET-BS

For Catalog Terms Beginning in Fall 2016

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

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Fall 1st Year	CR	GR	Sem	Fulfilled by	Spring 1st Year	CR	GR	Sem	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* or	3-4				ECET 17900 Intro to Digital Systems	3					
ENGL 10800 Accel. First Year Comp*					(Prereq: ENGT 18000/18100 and CNIT 10500)						
CNIT 10500 Intro to C Programming	3				COM 11400 Fund of Speech Communication*	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				PHYS 21800 General Physics I*	4					
TOTAL CREDIT HOURS	16				TOTAL CREDIT HOURS	16					

Fall 2 nd Year	CR	GR	Sem	Fulfilled by	Spring 2 nd Year	CR	GR	Sem	Fulfilled by
ECET 22700 DC & Pulse Electronics ^{CC}	3				ECET 27000 Electronics Prototype Dev/Const	3			
(Prereq: ECET 17700 and MA 16010)					(Prereq: ECET 17900, ECET 22700, ECET 229)				
ECET 22900 Concurrent Digital Systems	3				ECET 27400 Wireless Communications	3			
(Prereq: ENGT 18000/ENGT 18100)					(Prereq: ECET 22700, ECET 27000 (may be				
					taken concurrently) and PHYS 21900)				
PHYS 21900 General Physics II*	4				ECET 27700 AC & Power Electronics	3			
(Prereq: PHYS 21800)					(Prereq: ECET 17700 and MA 16010) <i>or</i>				
					ECET 27900 Embedded Digital Systems ^{CC}				
					(Prereq: ECET 17900)				
General Education Selective*	3				General Education Selective**	3			
Communication Selective	3				Communication 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
ECET Selective	3				ECET Selective	3			
ECET 33700 Analog Signal Processing (Prereq: ECET 27700 and MA 16020) or ECET 33900 Digital Signal Processing (Prereq: ECET 27900 and MA 16020) ECET 37600 Modern Energy Systems	3				ECET 27700 AC & Power Electronics (Prereq: ECET 17700 and MA 16010) or ECET 27900 Embedded Digital Systems ^{CC} (Prereq: ECET 17900) Business Selective**	3			
(Prereq: ECET 27700 and PHYS 21800) ECET 38001 Global Prof Issues in ET (Prereq: Junior Class or higher)	3				Technical Selective	3			
STAT 22500 Intro to Probability Models (Prereq: MA 16020) or STAT 30100 Elem Statistical Methods	3				IET 45100 Monetary Analysis for Ind Dec or IT 45000 Production Cost Analysis (Prereq: Junior Class. or higher, MA 16010)	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 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								
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	12			

Refer to the Supplemental Information Sheet for Electrical Engineering Technology Fall 2016 Plan of Study sheet for a complete list of selectives and requirements.

- 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. 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.

^{*}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.

Supplemental Information Sheet for Electrical Engineering Technology (EETC) Fall 2016 Plan of Study

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.

Audio

ECET 33700 Analog Signal Processing ECET 33900 Digital Signal Processing ECET 38800 Analog IC Applications ECET 42800 Audio Electronics Topics

Communications

ECET 36400 Fundamentals of Electromagnetics ECET 37401 Digital Communication Systems ECET 44400 Wireless Systems: Design & Meas ECET 48400 Digital Wireless Systems

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 ECET 34100 Bio-compatibility and Bioissues

Smart Environment

ECET 30201 Introduction to Industrial Controls ECET 32700 Instrumentation and DAQ Design ECET 37200 Process Control

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

- 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.

Advanced Analysis Selective (3 hours): ECET 33700 Analog Signal Processing or ECET 33900 Digital Signal Processing.

- 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 136 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 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.

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
- Oral communication (3 hours): Any communications (COM) course at the 200 level or higher.

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) 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

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

ECET 38600 Bldg Elec Codes & Std Practices

ECET 43600 Elec Power Tran Distrib & Smart

ECET 32300 Intro to Elec Vehicle Systems

ECET 37300 Applied Electronic Drives ECET 42301 Elec Vehicle Integr/Fabrication

Study Abroad/Professional Practice

ECET Co-op Sessions 4 and 5

ECET 33300 Power Electronics in Energy System

ECET 49900 Sustainable Energy Technologies

Control

Smart Mobility

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

OLS 32500 Meeting Management

- One course must be from the UCC approved list of Human Culture: Humanities http://www.purdue.edu/provost/initiatives/curriculum/course.html).
- One course must be from the UCC approved list of Human Culture: Behavior/Social Sciences (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: $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac$

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

African American Studies (AAS)
African American Studies (AAS)
Art and Design (AD),
Art and Design (AD),
Classics (CLCS)
American Studies (AMST)
Comparative Literature (CMPL)
Anthropology (ANTH)
Communication (COM)
Asian American Studies (ASAM)
American Sign Language (ASL)
History (HIST)

Interdisciplinary Studies (IDIS)

Linguistics (LING)

Music History and Theory (MUS)

Philosophy (PHIL)

Political Science (POL)

Religious Studies (REL)

Sociology (SOC)

Theater (THTR)

Women's Studies (WOST)

ROTC (AFT, MILT, NS)

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 I and II Selectives and at least 12 hours of ECET Selectives must be completed at the Purdue University location conferring the degree.

Updated 04/19/2016