

1 1

# **Electrical Engineering Technology** Purdue Polytechnic Institute

TECET-BS AUET 120-cr for graduation "D-" or better required in all major courses

	ntal/Program Major Courses (120 credits)		
	ired Major Courses (52 credits)		
(3)	ECET 12000 - Gateway to EET		
	ECET 17700 - Data Acquisition and Systems Control		
(3)	ECET 17900 - Introduction to Digital Systems		·
(1)	ECET 22000 - Professional Career Development		
(3)	ECET 22700 - DC and Pulse Electronics		
(3)	ECET 22900 - Concurrent Digital Systems		
(3)	ECET 27000 - Electronics Prototype Development and Construction	on	
(3)	ECET 27300 - Modern Energy Systems		
(3)	ECET 27400 - Wireless Communication		
(3)	ECET 27700 - DC & Pulse Electronics		•
(3)	ECET 27900 - Embedded Digital Systems		
(3)	ECET 33700 - Analog Signal Processing		
(3)	ECET 33900 - Digital Signal Processing		
(3)	ECET 38001 - Global Professional Issues in ET		
(3)	ECET 38800 - Analog IC Applications		
	ECET 42800 - Audio Electronics Design		
	ECET 43000 - Electrical & Electronic Product & Program Managen	nent	
(3)	ECET 46000 - Project Design & Development		
	Selectives – Select one of the following courses by category	(3 credits)	
(3)	ECET Selective https://tech.purdue.edu/sites/default/files/EET-	fall-2014.pdf	
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 co	ore)
(3)	MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning)	for core)	
(3)	MA 16021 - Applied Calculus II and Differential Equations		
(3)	MET 49000 - Introduction to Acoustics		
(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	on Literacy and Science, Tec	hnology & Society for core)
(2)	THTR 16300 - Introduction to Sound Design		
(3)	THTR 20100 - Theater Appreciation (satisfies Human Cultures: H	umanities for core)	
(3)	THTR 25300 - Survey of Audio Production or THTR 26300 - Introd	- ·	
(3)	THTR 35300 - Theater Audio Techniques I		
(1)	THTR 36800 or DANC 36800 - Theater or Dance Sound Design (2	for Theater Production Mir	nor)
(3)	English Composition Selective (choose from ENGL 10600 or ENG		
(6)	Business Selective and General Education Selective (choose from		
	Behavioral/Social Sciences category for core must be met b		
(6)	Communication Selectives (choose from list)	,	u
(3)	Industrial Economics Selective (choose from IET 45100 or IT 450	OO)	
(3)	Statistics Selective (choose from STAT 30100 or STAT 22500)	<b>50</b> ,	
(3)	Advanced Theater Sound Selective (choose from THTR 36300, Th	TR 56300 THTR 56900 or	THTR 59700\
(3)	Free Elective	1111 20000, 11111 30300 bi	11,11(33760)
	Core Requirements		
	<del></del>	ence	Ø
Human Cultures:		ence	
Information Litera	rcy Sci	ence, Technology & Society	
Oral Communicat	ion party and We	itten Communication	<i>a</i>
Quantitative Reas	oning ;		
*******	**************************************	************	********



School	of Engineering	Technology
		Ψ.

Major: Audio Engineering Technology (AUET) **EET-BS Suggested Arrangement of Courses** 

Catalog Term:	PUID	

For Catalog Terms beginning in Fall 2015 Major Code: AUET Program Code: TECET-BS

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

Name

Fall 1st Year	CR	GR	Sem	Fulfilled by	Spring 1st Year	CR	GR	Sem	Fulfilled by
ECET 12000 Gateway to EET	3				ECET 17700 DAQ & Systems Control (Prereq: ECET 12000)	3			
ENGL 10600 First Year Composition* or ENGL 10800 Accel. First Year Comp*	3-4				ECET 17900 Intro to Digital Systems (Prereq: ECET 12000 and CNIT 10500)	3			
CNIT 10500 Intro to C Programming	3				COM 11400 Fund of Speech Communication*	3		T	
MA 16010 Applied Calculus I* (Prereq: ALEKS Score of 75%)	3				MA 16021 Applied Calculus II with Diff Egns* (Prereq: MA 16010 with grade of C-or better)	3			
TECH 12000 Design Thinking In Tech.*	3				PHYS 21800 General Physics I*	4			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	16			

Fall 2 <sup>nd</sup> Year	CR	GR	Sem	Fulfilled by	Spring 2 <sup>nd</sup> Year	CR	GR	Sem	Fulfilled by
ECET 22700 DC & Pulse Electronics (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: ECET 12000)	3				ECET 27400 Wireless Communications (Prereq: ECET 22700, ECET 27000 (may be taken concurrently) and PHVS 21900)	3			
ECET 27300 Modern Energy Systems (Prereq: ECET 12000 and PHYS 21800)	3				ECET 27700 AC & Power Electronics (Prereg: ECET 17700 and MA 16010)	3			
PHYS 21900 General Physics iI* (Prereq: PHYS 21800)	4				,				
ECET 22000 Professional Career Devel.	1	l			THTR 20100 Theater Appreciation*	3		-	
THTR 16300 Intro to Sound Des/Tech	2		1		Communication Selective	3			
TOTAL CREDIT HOURS	16	]	T		TOTAL CREDIT HOURS	15	-		-

Fall 3 <sup>rd</sup> Year	CR	GR	Sem	Fulfilled by	Spring 3 <sup>rd</sup> Year	CR	GR	Sem	Fulfilled by
ECET 33700 Analog Signal Processing AAS (Prereq: ECET 27700 and MA 16021)	3				ECET 27900 Embedded Digital Systems (Prereg: ECET 17900)	3	<b>†</b>		,
ECET Selective	3				ECET 38001 Global Professional Issues in ET (Prereq: Junior Classification or higher)	3			
MET 49000 Introduction to Acoustics	3	i			ECET 38800 Analog IC Applications (Prereq: ECET 27700, may be taken concurrently)	3			
STAT 22500 Intro to Probability Models (Prereq: MA 16021) 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			
THTR 25300 Survey of Audio Production	3	1			THTR 36800 or Danc 368 Thtr/Dance Sound Des	1			
or THTR 26300 Intro to Sound Studios				<u>L</u>	Communications Selective	3	†		
TOTAL CREDIT HOURS	15			1	TOTAL CREDIT HOURS	16	<u> </u>		<del></del>

Fall 4 <sup>th</sup> Year (1911)	CR	GR	Sem	Fulfilled by	Spring 4 <sup>th</sup> Year	CR	GR	Sem	Fulfilled by
ECET 43000 Elec Product & Prog Mgmt (Prereq: ECET 27000, ECET 38001, 9 CR of ECET Selectives, of which 3 CR can be concurrent)	3				ECET 46000 Project Design and Development (Prereq: ECET 43000)	3			
ECET 33900 Digital Signal Processing (Prereq: ECET 27900 and MA 16021)	3				ECET 42800 Audio Electronics (Prereq: ECET 33700 and MA 33900)	3			
THTR 35300 Theater Audio Tech I	3				Free Elective	3			
Business Selective**	3		-		Technical Selective	1 2	<del> </del>	-	
General Education Selective**	3					<del>  -</del>	<del></del>		<del></del>
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	12	<del></del>	<del> </del>	

- **4**∦ - 1

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

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

Refer to <a href="https://tech.purdue.edu/sites/default/files/EET-fall-2014.pdf">https://tech.purdue.edu/sites/default/files/EET-fall-2014.pdf</a> for a complete list of requirements, options for selectives and pre-requisites.

\*Fulfills University Core Curriculum requirement.

\*AssAdvanced Analysis Selective: may be taken in either the Fall or Spring semester, depending on course selected.

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

<sup>120</sup> semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.

<sup>2.</sup> Students must earn a "D-" or better in all courses.

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

ECET 43000, ECET 46000 and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.

## Supplemental Audio Engineering Technology (AUET) Information Fall 2015 Plan of Study

ECET Selectives (3 hours): The ECET Selective can be selected from one of the following courses. Please note that not all ECET Selectives are offered every year.

#### 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 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** 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 49900 Sustainable Energy Technologies ECET Co-op Sessions 4 and

#### Advanced Theater Sound Selective: Choose from:

THTR 36300 Sound Design THTR 56300 Advanced Sound Design THTR 56900 Special Problems in Audio Production THTR 59700 Production and Design Seminar

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

- Written communication (3 hours). ENGL 20500 Introduction to Creative Writing; ENGL 30400 Advanced 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 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:

- 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. Specific courses that will satisfy the University Core Curriculum Human Cultures Behavior/Social Sciences (BSS) requirement are indicated with a BSS.

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

General Education Selectives (3 hours). The student may select the General Education Selective from the following subject areas (disciplines):

Mgmt

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

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

THTR Design and Production Minor: Students who complete THTR 16300, THTR 20100, THTR 25300 or THTR 26300, THTR 35300, THTR 36800 or DANC 36800 (2 credit hours total), and one additional Theater course (from an approved list) will be eligible for the THTR Design and Production Minor (https://www.cla.purdue.edu/students/academics/programs/pos/MTHDT200920.pdf). The minor requires an additional three credit hours (which can be used to satisfy the Free Elective); at least 50% of the courses for the minor must be taken at Purdue University.

Upper-level courses: At least 32 hours of upper level (300 level or higher) must be completed at Purdue University; ECET 430, ECET 460 and at least 12 hours of ECET Selectives must be completed at the Purdue University location conferring the degree. Updated 07/23/2015