# **ELECTRICAL ENGINEERING** TECHNOLOGY, A.ENGT. (ENGINEERING)

Begin Campus: Fayette, York End Campus: Fayette, York

# **Degree Requirements**

For the Associate in Engineering Technology degree in Electrical Engineering Technology, a minimum of 65 credits is required:

Requirement	Credits
General Education	21
Requirements for the Major	56-62

12-15 of the 21 credits for General Education are included in the Requirements for the Major. This includes: 3 credits of GN courses; 3 credits of GQ courses; 6 credits of GWS courses, 0-3 credits of GH or GS.

# **Requirements for the Major**

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (https://senate.psu.edu/policies-andrules-for-undergraduate-students/82-00-and-83-00-degree-requirements/ #82-44).

Code	Title	Credits
Prescribed Courses		
CAS 100	Effective Speech	3
CMPET 211	Embedded Processors and DSP	3
EET 212W	Op Amp and Integrated Circuit Electronics	4
EET 214	Electric Machines and Energy Conversion	3
EET 215	Electric Machines and Energy Conversion Laboratory	1
Prescribed Courses: Require a grade of C or better		
CMPET 117	Digital Electronics	3
CMPET 120	Digital Electronics Laboratory	1
EET 114	Electrical Circuits II	4
EET 118	Electrical Circuits Laboratory	1
Additional Courses		
ENGL 15	Rhetoric and Composition	3
or ENGL 30H	Honors Rhetoric and Composition	
PHYS 150	Technical Physics I	3-4
or PHYS 211	General Physics: Mechanics	
or PHYS 250	Introductory Physics I	
Select 5-6 credits of the following: 5-6		5-6
MATH 22 & MATH 26	College Algebra With Analytic Geometry and Applications II and Plane Trigonometry and Applications of Trigonometry	
MATH 40	Algebra, Trigonometry, and Analytic Geometry	I
MATH 81 & MATH 82	Technical Mathematics I and Technical Mathematics II 1	

		26 credits from one of the following three tracks: 22-26			
Α.	A. General Track <sup>2</sup>				
	EDSGN 100	Cornerstone Engineering Design			
	EET 105	Electrical Systems			
	EET 275	Introduction to Programmable Logic Controls			
or EMET 230Computerized I/O Systems					
	IET 101	Manufacturing Materials, Processes, and Laboratory			
	MET 111	Mechanics for Technology: Statics			
	PHYS 151	Technical Physics II			
	or PHYS 212	General Physics: Electricity and Magnetism			
or PHYS 251 Introductory Physics II					
	or CHEM 11	(Chemical Principles I			
	& CHEM 111	and Experimental Chemistry I			
	STS 200	Critical Issues in Science, Technology, and Society			
	or STS/ PHIL 233	Ethics and the Design of Technology			
	or STS 245				
	Select 3-4 cred approved progr	its in consultation with your adviser from the ram list			
В.		Electrical and Computer Engineering Technology (ECET)			
	ack:	, , , , , , , , , , , , , , , , , , , ,			
	CHEM 110	Chemical Principles I			
	CHEM 111	Experimental Chemistry I			
	CMPET 5	Engineering Methods in Engineering Technology			
	EET 2	Introduction to Engineering Technology			
	EET 101	Electrical Circuits I			
	EET 109	Electrical Circuits Laboratory I			
	EET 275	Introduction to Programmable Logic Controls			
	EGT 119	Introduction to CAD for Electrical and Computer Engineering			
	MATH 83	Technical Calculus			
	or MATH 14	(Calculus With Analytic Geometry I			
	MATH 210	Calculus with Engineering Technology Applications (or 3 credits of General Education natural science GN)			
C. Baccalaureate Electro-Mechanical Engineering Technology (EMET) Track <sup>2,3</sup>					
	EDSGN 100	Cornerstone Engineering Design			
	EET 105	Electrical Systems			
	EET 275	Introduction to Programmable Logic Controls			
	or EMET 230	OComputerized I/O Systems			
	IET 101	Manufacturing Materials, Processes, and Laboratory			
	MET 111	Mechanics for Technology: Statics			
	MATH 83	Technical Calculus			

or MATH 14(Calculus With Analytic Geometry I Technical Physics II

or PHYS 251 Introductory Physics II or CHEM 110Chemical Principles I & CHEM 111 and Experimental Chemistry I

or PHYS 212 General Physics: Electricity and Magnetism

Critical Issues in Science, Technology, and Society

**PHYS 151** 

STS 200

or STS/ Ethics and the Design of Technology PHIL 233 or STS 245

- A student planning to re-enoll into the baccalaureate degree major of Electro-Mechanical Engineering Technology (EMET), after graduation from the 2 EET program, must receive a grade of C or better in order to meet requirements of the EMET degree.
- This includes 3 credits of General Education courses: 3 credits of GH or GS.
- A student planning to re-enroll into the baccalaureate degree major of Electrical Engineering Technology at Penn State Harrisburg, after graduation from the 2EET program, should follow Track C. They should select MATH 140 instead of MATH 83.

## **General Education**

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all associate degree students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (https://bulletins.psu.edu/undergraduate/general-education/associate-degree-general-education-program/) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

# Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)

- · Quantification (GQ): 3 credits
- · Writing and Speaking (GWS): 3 credits

### **Knowledge Domains**

- · Arts (GA): 3 credits
- Humanities (GH): 3 credits
- · Social and Behavioral Sciences (GS): 3 credits
- · Natural Sciences (GN): 3 credits

**Note:** Up to six credits of Inter-Domain courses may be used for any Knowledge Domain requirement, but when a course may be used to satisfy more than one requirement, the credits from the course can be counted only once.

#### **Exploration**

 Any General Education course (including GHW and Inter-Domain): 3 credits

### **University Degree Requirements**

### **Cultures Requirement**

3 credits of United States (US) or International (IL) cultures coursework are required and may satisfy other requirements

#### **Writing Across the Curriculum**

3 credits required from the college of graduation and likely prescribed as part of major requirements.

#### **Total Minimum Credits**

A minimum of 60 degree credits must be earned for a associates degree. The requirements for some programs may exceed 60 credits. Students should consult with their college or department adviser for information on specific credit requirements.

#### **Quality of Work**

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

#### **Limitations on Source and Time for Credit Acquisition**

Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80)). For more information, check the Suggested Academic Plan for your intended program.