

# Electronics Engineering Technology

## Bachelor of Science (BS)

This degree map is based on the 2023-24 Academic Catalog and is subject to change. Students should meet with their academic advisor each semester and use Degree Works to monitor their individual progress toward degree completion. The time it takes to earn a degree will vary based on several factors including summer/winter enrollment, dual enrollment and number of courses successfully completed each semester. We recommend taking a minimum of 15 credits each fall and spring semester.

### Sample 4 1/2-Year Plan

<b>First Year</b>			
<b>Fall Courses</b>	<b>Credits</b>	<b>Spring Courses</b>	<b>Credits</b>
ENGT101 Intro to Engineering Tech	3	MATH160 Calculus 1 (GenEd: Q)	4
Free Elective (MATH140 Precalculus, if needed)	3	PHYS211 General Physics 1 (GenEd: N)	4
General Education course (U, First Year Seminar)	3	COMM101 Public Speaking (GenEd: O)	3
WRIT103 Foundations in Composition (GenEd: W)	3	ENGT180 CAD & Engineering Graphics	3
General Education Course (H)	3		
Semester Total	15	Semester Total	14
<b>Second Year</b>			
<b>Fall Courses</b>	<b>Credits</b>	<b>Spring Courses</b>	<b>Credits</b>
ENGT141 Circuit Analysis	4	CHEM121 General Chemistry 1 (GenEd: N)	4
PHYS212 General Physics 2	4	PHYS315 Electronics	4
MATH170 Calculus 2	4	CMSC115 Python Programming (GenEd: T)	3
General Education Course (D)	3	General Education Course (G)	3
Semester Total	15	Semester Total	14
<b>Third Year</b>			
<b>Fall Courses</b>	<b>Credits</b>	<b>Spring Courses</b>	<b>Credits</b>
ENGT241 Elect Instrument & Data Acquisition	3	ENGT331 Linear Signals and Systems	4
PHYS316 Digital Electronics	3	ENGT321 Manufacturing and Automation	3
ENGT231 Electrical Machines and Power Systems	4	ENGT300 Engineering Your Career	2
General Education Course (D or G or F)	3	PHYS317 Computer Electronics	3
General Education Course (E)	3	General Education Course (S or R)	3
Semester Total	16	Semester Total	15
<b>Summer</b>			
<b>Summer Courses</b>	<b>Credits</b>		
ENGT380 Cooperative Education in Industry	1		
Semester Total	1	Semester Total	0
<b>Fourth Year</b>			
<b>Fall Courses</b>	<b>Credits</b>	<b>Spring Courses</b>	<b>Credits</b>
Industry Co-op continues through Fall semester	0	ENGT431 Industrial Process Control	3
		ENGT441 Communication Systems	4
		ENGT381 Engineering Applications in Industry	2
		General Education Course (L)	3
Free Elective		Free Elective	3
Semester Total	0	Semester Total	15
<b>Fifth Year</b>			
<b>Fall Courses</b>	<b>Credits</b>		
ENGT461 Radio Freq Effects and Measurements	3		
ENGT491 Senior Design Projects	3		
General Education Course (A or C)	3		
Free Elective	3		
Free Elective	3		
Semester Total	15		

# Electronics Engineering Technology

## Curriculum Checklist

### Required Courses (75 credits)

- \_\_\_ ENGT101 Introduction to Engineering Technology (3)
- \_\_\_ ENGT180 Computer Aided Design & Engineering Graphics (3)
- \_\_\_ ENGT141 Circuit Analysis (4)
- \_\_\_ ENGT231 Electrical Machines and Power Systems (4)
- \_\_\_ ENGT241 Electronic Instrumentation and Data Acquisition (3)
- \_\_\_ ENGT300 Engineering Your Career (2)
- \_\_\_ ENGT321 Manufacturing and Automation (3)
- \_\_\_ ENGT331 Linear Signals and Systems (4)
- \_\_\_ ENGT380 Cooperative Education in Industry (1)
- \_\_\_ ENGT381 Engineering Applications in Industry (2)
- \_\_\_ ENGT431 Industrial Process Control (3)
- \_\_\_ ENGT441 Communication Systems (4)
- \_\_\_ ENGT461 Radio-Frequency Effects and Measurements (3)
- \_\_\_ ENGT491 Senior Design Project (3)
- \_\_\_ PHYS211 General Physics 1 (4) (N)
- \_\_\_ PHYS212 General Physics 2 (4)
- \_\_\_ PHYS315 Electronics (4)
- \_\_\_ PHYS316 Digital Electronics (3)
- \_\_\_ PHYS317 Computer Electronics (3)
- \_\_\_ CHEM121 General Chemistry 1 (4) (N)
- \_\_\_ COMM101 Public Speaking (3) (O)
- \_\_\_ CMSC115 Python Programming (3) (T)
- \_\_\_ MATH160 Calculus 1 (4) (Q)
- \_\_\_ MATH170 Calculus 2 (4)
- \_\_\_ WRIT 103 Foundations in Composition (3) (W)

## General Education Requirements

### (45 credits)

*Note: Some requirements may be fulfilled by coursework in your major program including directed Gen Ed courses noted below*

- Foundations (15 credits)
  - FYS (U): FYS100 First Year Seminar
  - Writing (W): WRIT 103 Foundations in Composition
  - Oral Comm. (O): COMM101 Public Speaking
  - Quantitative (Q): MATH160 Calculus 1
  - History (H):
- Interconnections (9 credits)
  - Diversity (D):
  - Global Perspectives. (G):
  - D or G or Foreign Lang. (F):
- Citizenship & Responsibility (6 credits from at least two goals)
  - Goal 1: Citizenship (C):
  - Goal 2 Ethical Reasoning (E):
  - Goal 3: Crit. Reasoning (R):
- Natural World & Technologies (9 credits)
  - Natural World (N): CHEM121 General Chemistry 1
  - Natural World (N): PHYS211 General Physics 1
  - Technology (T): CMSC115 Python Programming
- Creativity & Expression (6 credits)
  - Literature (L):
  - Arts (A) or Creativity (C):

## Degree Requirements

All students must obtain a minimum of 120 credits, complete all General Education requirements, and all requirements for the selected major. Meet with your advisor and consult Degree Works to monitor your progress and for all graduation requirements.

*A minimum GPA of 2.0 in the major and overall are required.*

## Campus Locations

- |                   |  |
|-------------------|--|
| <b>Bloomsburg</b> | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| <b>Lock Haven</b> | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| <b>Mansfield</b>  | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| <b>Clearfield</b> | <input type="checkbox"/> Online; <input type="checkbox"/> In-person; <input type="checkbox"/> Blended            |

*2+2\*: First two years of the curriculum are offered at the respective home campus (Lock Haven or Mansfield) and the final two years of the curriculum are offered at the Bloomsburg campus. Note that the Electronics Engineering Technology program is a 4.5 year program as students complete co-op education at off-campus industrial locations in their third summer and fourth fall.*