

BIOMEDICAL ENGINEERING TECHNOLOGY, A.ENG.T.

Begin Campus: Wilkes-Barre, Altoona, Berks, DuBois, Erie, Fayette, New Kensington, York

End Campus: New Kensington

Degree Requirements

For the Associate in Engineering Technology degree in Biomedical Engineering Technology, a minimum of 71 credits is required:

| Requirement | Credits |
|----------------------------|---------|
| General Education | 21 |
| Requirements for the Major | 62-65 |

12 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.

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 (<http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44>).

| Code | Title | Credits |
|---|--|---------|
| Prescribed Courses | | |
| BE_T 101 | Introduction to Medical Equipment Maintenance | 1 |
| COMPET 117 | Digital Electronics | 3 |
| COMPET 120 | Digital Electronics Laboratory | 1 |
| EET 105 | Electrical Systems | 3 |
| IST 220 | Networking and Telecommunications | 3 |
| PHYS 150 | Technical Physics I | 3 |
| RADSC 230 | Radiographic Physics | 3 |
| <i>Prescribed Courses: Require a grade of C or better</i> | | |
| BE_T 201 | Medical Equipment & Systems I | 5 |
| BE_T 203 | Biomedical Equipment Laboratory (Internship) (must be the last course taken for the degree) ¹ | 4 |
| BE_T 204W | Medical Equipment and Systems II | 5 |
| BE_T 205 | Medical Electronics | 4 |
| BE_T 206 | Medical Computers and Networks | 4 |
| CAS 100 | Effective Speech | 3 |
| ENGL 15 | Rhetoric and Composition | 3 |
| SRA 111 | Introduction to Security and Risk Analysis | 3 |
| Additional Courses | | |
| CHEM 110 | Chemical Principles I | 3 |
| | or CHEM 130 Introduction to General, Organic, and Biochemistry | |
| Select Sequence A or Sequence B: | | 6-8 |

Sequence A:

| | |
|----------|---|
| BIOL 161 | Human Anatomy and Physiology I - Lecture |
| BIOL 162 | Human Anatomy and Physiology I - Laboratory |
| BIOL 162 | Human Anatomy and Physiology I - Laboratory |
| BIOL 163 | Human Anatomy and Physiology II - Lecture |

| | | |
|---|--|-----|
| BIOL 164 | Human Anatomy and Physiology II - Laboratory | |
| <i>Sequence B:</i> | | |
| BISC 4 | Human Body: Form and Function | |
| Select 3 credits of technical list: | | |
| BE_T 210 | Troubleshooting Medical Equipment | |
| BE_T 296 | Independent Studies | |
| BE_T 297 | Special Topics | |
| BIOL 129 | Mammalian Anatomy | |
| COMPET 211 | Embedded Processors and DSP | |
| COMPSC 101 | Introduction to Programming | |
| EDSGN 100 | Cornerstone Engineering Design | |
| EET 213W | Fundamentals of Electrical Machines Using Writing Skills | |
| EET 297 | Special Topics | |
| EGT 201 | Advanced Computer Aided Drafting | |
| MET 111 | Mechanics for Technology: Statics | |
| <i>Additional Courses: Require a grade of C or better</i> | | |
| MATH 22 & MATH 26 | College Algebra II and Analytic Geometry and Plane Trigonometry ² | 5-6 |
| | or MATH 40 Algebra, Trigonometry, and Analytic Geometry | |

¹ BE_T 203 must be the last course taken for the degree.

² A grade of C or better is required for either MATH 22 or MATH 26.

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.)

- **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 is used to satisfy more than one requirement, the credits from the course can be counted only once.

Foundations or Knowledge Domains

- **Any General Education course:** 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 (<http://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.