Degree Requirements

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

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>21</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>62-63</td>
</tr>
</tbody>
</table>

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.

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 baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (http://bulletins.psu.edu/undergraduate/general-education/associate-degree-general-education-program) section of the Bulletin and consult your academic adviser.

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

Foundations or Knowledge Domains

- A General Education course selected from GWS, GQ, GN, GA, GH, or GS, and may include Integrative Studies (Inter-domain or Linked) courses: 3 credits

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.

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). For more information, check the Suggested Academic Plan for your intended program.

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. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 82-44). For more information, check the Suggested Academic Plan for your intended program.

Program Educational Objectives
The Biomedical Engineering Technology program is designed to provide a curriculum that prepares students to pursue a career in the evolving healthcare technology management (HTM) field and to develop in their profession. Due to their experience in our program, within a few years of graduation, we expect our graduates to have the ability to:

1. Apply knowledge, standards, regulations, and quality improvement plans to install, perform acceptance testing and preventive maintenance (PMs) inspections, troubleshoot, and repair a wide variety of medical devices.
2. Work in the healthcare technology management (HTM) field.
3. Engage in continuous learning through CBET certification and/or other professional training programs and independent study.
4. Work both independently and collaboratively in multi-disciplinary teams, communicating effectively with relevant healthcare related professionals.

Student Outcomes
Student outcomes describe what students are expected to know and be able to do by the time of graduation. The Biomedical Engineering Technology program is designed to enable students to:

1. Apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering and technology to solve well-defined engineering problems appropriate to the discipline.
2. Design solutions for well-defined technical problems and assist with engineering design of systems, components, or processes appropriate to the discipline.
3. Apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. Conduct standard tests, measurements, and experiments and to analyze and interpret the results.
5. Function effectively as member of technical team.

Academic Advising
The objectives of the university’s academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of-class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisors assume a significant educational role. The advisee’s unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.
Suggested Academic Plan

The course series listed below provides only one of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an Academic Requirements or What If report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE_T 101</td>
<td>1</td>
<td>CMPET 117</td>
<td>3</td>
</tr>
<tr>
<td>EET 105</td>
<td>3</td>
<td>CMPET 120</td>
<td>1</td>
</tr>
<tr>
<td>IST 110*</td>
<td>3</td>
<td>IST 220</td>
<td>3</td>
</tr>
<tr>
<td>MATH 26*</td>
<td>3</td>
<td>MATH 22 (GQ)*</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 15*</td>
<td>3</td>
<td>CHEM 101</td>
<td>2-3</td>
</tr>
<tr>
<td>General Education Course</td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>15-16</td>
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</table>

Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE_T 201†</td>
<td>4</td>
<td>BE_T 204†</td>
<td>5</td>
</tr>
<tr>
<td>BE_T 205‡</td>
<td>3</td>
<td>Technical Elective (See Adviser for list)</td>
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</tr>
<tr>
<td>BIOL 141 or BISC 4 (GN)†</td>
<td>3</td>
<td>3 CAS 100</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 150 (GN)</td>
<td>3</td>
<td>RADSC 230</td>
<td>3</td>
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<tr>
<td></td>
<td>18</td>
<td>18</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 71-72

* Course requires a grade of C or better for the major
† Course requires a grade of C or better for General Education
‡ Course is an Entrance to Major requirement

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GN, GA, GH, and GS). Foundations courses (GWS and GQ) require a grade of ‘C’ or better.

Career Paths

Students with a degree in biomedical engineering technology are well positioned for careers at hospitals, clinics, medical practice offices, surgical centers, nursing homes, and rehabilitation centers.

Penn State students with an A.S. in Biomedical Engineering Technology have been successful in pursuing various careers within the Healthcare Technology Management field.

Careers

• Biomedical Engineering Technician/Clinical Engineer in a Hospital
• Field Service Technician
• Repair Technician for a Medical Device Company

Accreditation

This program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org (http://www.abet.org).

Contact

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