

ELECTRICAL ENGINEERING TECHNOLOGY, B.S. (ENGINEERING)

Begin Campus: Any Penn State Campus

End Campus: Wilkes-Barre

Program Educational Objectives

The BS EET program educational objectives are to produce graduates who, during the first few years of professional practice, will be able to perform the following functions or activities at a level appropriate to their baccalaureate degree:

1. Accomplish mastery in electronics, electrical circuit analysis, electrical machines, and microcontrollers. Accomplish mastery in the design and implementation of at least two of these systems: control systems; communication systems; power systems.
2. Apply creativity using project-based work to design systems of processes for broadly defined and complex engineering problems.
3. Produce lucid documents, deliver effective oral presentations with professional quality graphics. Communicate effectively in a professional manner. Include the use of appropriate technical literature.
4. Design and conduct open-ended experiments for broadly defined and complex engineering problems. Analyze and interpret their results. This includes the use of appropriate instruments and simulation tools and the development of appropriate software code.
5. Effectively work in technical groups including functioning as their leader.

Student Outcomes

Graduates of the Electrical Engineering Technology program should demonstrate:

1. An ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member as well as a leader on technical teams.