

BIOTECHNOLOGY, B.S.

Seven Penn State campuses are scheduled for closure after Spring 2027: DuBois, Fayette, New Kensington, Mont Alto, Shenango, Wilkes-Barre, and York. New students are not being admitted at these campuses.

Begin Campus: Any Penn State Campus

End Campus: University Park

Program Learning Objectives

- Demonstrate knowledge of major biotechnological concepts, theories, and empirical findings.
- Demonstrate the ability to apply biotechnological concepts and theories to research and real life situations.
- Differentiate among different techniques used in biotechnology and apply them in designing an experiment.
- Demonstrate the ability to analyze and interpret quantitative biotechnological data using statistics, graphs, and data tables.
- Use critical and creative thinking, skeptical inquiry, and the scientific approach to solve problems related to current issues in biotechnology.
- Demonstrate critical thinking in the analysis and evaluation of information to distinguish scientific from nonscientific claims related to biotechnology and demonstrate critical thinking in the analysis, evaluation, and interpretation of information in the scientific literature to distinguish the scientific literature from other sources.
- Communicate effectively (in writing and/or orally) the results of a project or internship.
- Demonstrate the ability to effectively create solutions to current issues in biotechnology and present these to peers.
- Demonstrate efficiency to extract central points and summarize biotechnological research literature and to write in the format of biotechnological research.
- Demonstrate knowledge, and the application of, basic principles of scientific and professional ethics.
- Demonstrate knowledge of professional options and required training for careers in the major subfields of biotechnology.
- Demonstrate the ability to identify personally-relevant career options to implement their biotechnological knowledge, skills, and values in occupational pursuits in a variety of settings.