Bloomsburg LOCK HAVEN MANSFIELD

COMMONWEALTH UNIVERSITY OF PENNSYLVANIA

Bachelor's Degree in Computer Science
Department of Mathematics, Computer Science, and Statistics

Program Educational Objectives

Three to five years after graduation, alumni will be pursing an advanced degree or they will:

1. be professionally employed in the computing field.
2. communicate and collaborate effectively in a team environment.
3. continue to grow professionally by adapting to new technologies and assuming leadership responsibilities.

Student Outcomes

The program has ten student outcomes in six categories.

Software Engineering

1. Students will have excellent programming skills involving at least two object-oriented languages.
2. Students will be able to write a significant application that utilizes a database for data storage and retrieval.
3. Students will be knowledgeable about software design processes and methodologies.

Operating Systems

4. Students will have a strong understanding of operating system concepts.

Hardware

5. Students will have a strong understanding of computer hardware concepts.

Problem Solving

6. Students will be able to solve programming problems.
7. Students will be able to analyze the complexity of algorithms.
8. Students will be able to determine what Abstract Data Type (ADT) should be used to solve a problem and what data structure should be used to efficiently implement an ADT.

Communication

9. Students will demonstrate oral and written communication skills necessary to read, write, and speak effectively about technical issues in computing.

Ethics

10. Students will understand ethical and legal issues involved with computer use.