

# COMPUTER SCIENCE, B.S. (CAPITAL)

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**Begin Campus:** Any Penn State Campus

**End Campus:** Harrisburg

## Program Learning Objectives

- **Know Algorithmic Problem Solving and Analysis:** Formulate and solve problems using appropriate data structures and algorithmic techniques; analyze the efficiency and correctness of the algorithms.
- **Know Computer Hardware and Operating Systems:** Analyze the effects of computer hardware and operating systems design on the efficiency and correctness of software systems.
- **Know Programming Language Paradigms:** Express algorithms clearly and correctly in a variety of programming languages
- **Know Theoretical Foundations of Computer Science:** Explain and use the theoretical foundations of computer science effectively
- **Use Software Engineering Skills:** Design and implement large software systems through a strong foundation in the software development lifecycle, effective communication, and team work