COMPUTER SCIENCE, B.S. (CAPITAL)

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.