

Computer Science Learning Outcomes

Computer Science B.S.

The Computer Science B.S. program will enable students to achieve the following list of learning outcomes. By the time of graduation, the student should be able to:

- 1) Apply the theoretical and mathematical foundations of computing to solve a variety of computational problems and to design and implement computing systems
- 2) Design efficient software solutions by analyzing and customizing appropriate computational algorithms
- 3) Analyze computing problems and apply sound principles to define and compare alternative solutions for such problems
- 4) Demonstrate proficiency and competency in constructing software solutions by utilizing multiple programming languages and programming paradigms
- 5) Design, implement, and test software systems that meet users' requirements
- 6) Demonstrate the necessary interpersonal skills to work effectively in multi-disciplinary teams
- 7) Communicate technical ideas and concepts clearly with a range of audiences
- 8) Recognize ethical and professional responsibilities and apply sound principles for dealing with ethical issues in the computing field
- 9) Develop analytical problem-solving skills based on well-established techniques and tools used by computer science professionals
- 10) Demonstrate a sense of exploration and develop skills that enables lifelong learning