



University of California, Santa Barbara
Program Learning Outcomes

B.S. in Computer Science

The program enables students to achieve, by the time of graduation:

- An ability to apply knowledge of computing and mathematics appropriate to computer science.
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- An ability to function effectively on teams to accomplish a common goal.
- An understanding of professional, ethical, and social responsibilities.
- An ability to communicate effectively.
- An ability to analyze the impact of computing on individuals, organizations, and society, including ethical, legal, security, and global policy issue.
- Recognition of the need for and an ability to engage in continuing professional development.
- An ability to use current techniques, skills, and tools necessary for computing practice.
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices.
- An ability to apply design and development principles in the construction of software systems of varying complexity.