

## UNIVERSITY of CALIFORNIA • IRVINE

## Student Learning Outcomes for B.S. in Information and Computer Science

- Demonstrate competence in the prerequisites to the field of computing: basic science, mathematics, and communication.
- Demonstrate mastery of the core knowledge of computing: algorithms and data structures, computer architecture and organization, data management systems, operating systems, programming languages, software engineering and architecture, and theoretical foundations.
- 3. Demonstrate an ability to reason critically from facts and assumptions to conclusions: to formulate, analyze, synthesize, and implement effective solutions to computing problems.
- Possess the basic skills for application of computing knowledge: contemporary design-anddevelopment methodologies and application of the methodologies to individual, interdisciplinary, and team problem-solving activities.
- 5. Take a professional attitude towards the field: understanding of responsibilities toward other computing professionals, computing industries, computing societies, diverse groups, and society as a whole, as well as an understanding of the importance of life-long learning.