

# University of California, Santa Barbara Program Learning Outcomes

# **MS in Computer Science**

#### **Upon graduation with a MS in Computer Science:**

## Core Knowledge

- Students will be able to demonstrate a broad knowledge of areas cutting across the field of Computer Science, including systems, foundations, and applications.
- Students will have working knowledge of the state of the field in at least one subdomain of computing.

## Research Methods and Analysis

- Students will be able to understand and describe the range of qualitative and quantitative methodologies typically used in Computer Science research.
- Students will be able to plan and execute projects of significant complexity and analyze their work rigorously.

#### Scholarly Communication

Students will be able to review and cogently synthesize relevant literature.

#### **Professionalism**

- Students will understand and be able to articulate the importance of keeping current on technical advances in their discourse community.
- Students will be familiar with the relevant professional societies including, but not limited to, the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronics Engineers (IEEE).
- Students will be able to identify their career options post-graduation, both industrial and academic.
- Students will demonstrate a commitment to the thoughtful consideration of fundamental principles of ethical professional conduct.