

# Computer Science and Engineering, B.S.E.

The Bachelor of Science in Engineering (B.S.E.) program in computer science and engineering combines the technical content of a computer science degree and a computer engineering degree in a single degree program. The program curriculum is jointly taught by faculty from the Department of Electrical and Computer Engineering and the Department of Computer Science (College of Liberal Arts and Sciences). The program provides students with a strong theoretical and conceptual understanding of the principles underlying computer software and hardware along with the engineering analysis, design, and multidisciplinary teamwork skills needed to develop large and complex systems containing both software and hardware components.

The computer science and engineering program encompasses the technical rigor of a Bachelor of Science program in computer science and a Bachelor of Science program in computer engineering. Graduates gain the foundational knowledge provided by a computer science education together with the critical thinking, problem-solving, and system design skills at the heart of a computer engineering curriculum.

## Educational Objectives

Graduates of the computer science and engineering program will:

- exhibit leadership and vision in contributing to the computing-related technical and policy decisions of industry, government, and research enterprises;
- demonstrate computing skills and problem-solving abilities that permit them to contribute in a variety of technical, business, and academic careers;
- thrive in diverse, global, and multidisciplinary environments;
- possess the ability to communicate effectively and participate collaboratively in interactions with other computing and engineering professionals; and
- understand the importance of participating in lifelong learning activities that enhance their professional and personal development.