

# Computer Science

## General Information

### Degrees and Areas of Concentration

The Department of Computer Science offers many undergraduate and graduate degrees, certificates, and a minor.

At the undergraduate level, we offer the following degree programs

- B.S. (Bachelor of Science) in Computer Science
- B.S. in Computing Technology
- B.S. in Cybersecurity, Computer Science emphasis
- B.S. in Data Science, Computer Science emphasis

a minor in Computer Science, and the following certificates

- Artificial Intelligence
- Computer Programming
- Computer Programming Education
- Cybersecurity, with the Department of Information Systems and Technology
- Data Science, with the Department of Mathematics, Physics, Astronomy and Statistics
- Geographic Information Systems
- Internet and Web
- Mobile Apps and Computing

At the graduate level, we offer the following degree programs

- M.S. (Master of Science) in Computer Science
- M.S. in Cybersecurity, Computer Science emphasis
- Ph.D. (Doctor of Philosophy) in Mathematical and Computational Sciences, Computer Science option

and the following certificates

- Artificial Intelligence
- Cybersecurity, with the Department of Information Systems and Technology
- Data Science
- Internet and Web
- Mobile Apps and Computing

The department also offers a dual BS/MS degree program in Computer Science.

## Certificates

The certificate programs are designed for our undergraduate majors or graduate students, for students in other departments, and for non-students, to specialize in an area of interest. Certificates can be earned stand-alone, or they can be integrated into either an undergraduate or a graduate program. Some certificates are available online, and others can be taken in the evening, part-time or full-time.

## Career Outlook

A degree in a computing-related field prepares well-motivated students for interesting and fulfilling careers. The demand for individuals well trained in computer science, computing technology, and cybersecurity is greater

than the available supply. Furthermore, we offer specializations in artificial intelligence, web technologies, data science, and mobile apps.

Graduates from our programs are located throughout the country and they have a very strong local presence. They have careers in all sectors such as technology, banking, health care, engineering and manufacturing, at various levels and at places such as Google, Microsoft, Boeing, Mastercard, *etc.* Typically, our alumni are in technology or management, with some enjoying careers in education.

## Department Scholarships

The Department of Computer Science offers many merit-based and need-based scholarships, available to departmental majors.

The Alumni Scholarship is a monetary award for outstanding undergraduate students open to all junior and senior department majors.

The Edward Z. Andalaft Memorial Scholarship is a monetary award for outstanding undergraduate department majors at the sophomore level or higher.

The Computer Science Scholarship is a monetary award for outstanding computer science majors with preference given to freshman and sophomore students. Applicants must have a grade point average of 3.5 or higher in courses taken in the department.

The Boeing Company Scholars Program in Computer Science is a monetary award for full-time (at least 12 hours) upper-level undergraduate students in computer science. Recipients must have a minimum GPA of 3.2 and must maintain a GPA of 3.0. Preference will be given to traditionally underrepresented populations.

## Degrees

Computer Science BS

Computing Technology BS

Cybersecurity BS, Computer Science Emphasis

Computer Science BS/MS Dual Degree Program

Computer Science MS

Computer Science MS Accelerated Master's Program

Cybersecurity MS, Computer Science Emphasis

Cybersecurity MS, Computer Science Emphasis Accelerated Master's Program

Mathematical and Computational Science PhD, Computer Science Emphasis

## Minors

Computer Science Minor

## Undergraduate Certificates

Artificial Intelligence Undergraduate Certificate

Computer Programming Undergraduate Certificate

Computer Programming Education Undergraduate Certificate

Geographic Information Systems

Internet and Web Undergraduate Certificate

Mobile Apps and Computing Undergraduate Certificate

## **Graduate Certificates**

Artificial Intelligence Graduate Certificate

Data Science Graduate Certificate

Internet and Web Graduate Certificate

Mobile Apps and Computing Graduate Certificate

## **Affiliated Interdisciplinary Programs**

Data Science BS, Computer Science Emphasis

Cybersecurity Undergraduate Certificate

Data Science Undergraduate Certificate

Cybersecurity Graduate Certificate

## **Courses**

Courses offered by the department can be found at the links below:

Computer Science

Geographic Information Systems