College of Engineering
UMass Dartmouth

Computer Science
- Bachelor of Science
- Option in software engineering
- Offered as a minor in computer science, computer game design, or mobile applications development

The emphasis of Computer and Information Science is software, the methodologies of computing, and the study of powerful programming. You will be prepared to work in the computer industry and in business, in careers that have high growth and earning potential. You may work as a computer scientist, software engineer, software developer, database administrator, computer support specialist, or system administrator. You'll also be well-prepared to continue your studies at the graduate level.

Overview of skills developed

The computer science curriculum is programming intensive, supported by substantial laboratory components, and directed toward modern software development. Your studies are supplemented by work in specialized labs and a network of state-of-the-art workstations.

Curriculum outline: The major

Major requirements include 65 credits in general engineering and Computer Science, and 63 credits in Software Engineering option, with 120 credits overall.

Courses include algorithms, artificial intelligence, computer architecture, computer graphics, computer languages, models of computation, computer networks, databases, game design, graphics animation, human-computer interaction, operating systems, parallel and distributed computing, program design, programming, robotics, and software engineering.

During your senior year, you will complete a team-based senior capstone project that provides real-world experience defined by current industry needs.

An option is offered in **software engineering**, the systematic approach to the development, operation, and maintenance of software systems used in business, medicine, science, engineering, entertainment, and other fields.

Curriculum outline: The minors

- As a **computer science minor,** you will learn about the structure, methodologies, and trends in computer science. You will complete 21 credits in computer and information science courses.
- For a minor in **computer game design**, you will learn how to develop video games, independent of platform. You will complete 20 credits in computer science courses.
- A minor in **mobile applications development** prepares you to develop and market applications for mobile devices. You will complete 17 credits in computer science courses.

Internship sites

UMassD students intern with renowned companies, agencies, and institutions, including:

- Dell EMC
- General Dynamics
- Global Aquaculture Alliance
- Naval Undersea Warfare Systems

Graduate opportunities at UMassD

Qualified undergraduates can enroll in the accelerated BS/MS program that enables them to complete both degrees in computer science within five years.

An MS in computer science offers advanced study in theoretical computer science, computer systems, software engineering, parallel and distributed computing, and computer networks.

The PhD program in engineering and applied science emphasizes the interdisciplinary nature of modern research at the interfaces of engineering, the applied sciences, and technology.

Graduate school placements

Our graduates have attended:
- McGill University
- Northeastern University
- University of Colorado Boulder
- University of Southern California
- University of Texas at San Antonio
- University of Washington

Entry-level salary range: $58,990-$74,784
(National Association of Colleges and Employers 2019)

Career placements

Software developer was ranked #1 in *100 Best Jobs of 2019* by U.S. News. Our graduates secure jobs here and across the country at:

- Amazon
- Apple
- Google
- IBM
- Lifespan
- Lockheed Martin Corporation
- MathWorks, Inc.
- Microsoft Corporation
- Ocean Spray
- Oracle Corporation
- Putnam Investments

ABET — Computing Accreditation Commission