

### **UMaine's** ADVANTAGE

- Small classes and lots of interaction with faculty
- Undergraduate student research experience
- Summer job opportunities
- A great education pathway to many types of exciting and high-paying jobs

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umaine.edu/cis
To apply: umaine.edu





**COLLEGE OF LIBERAL ARTS AND SCIENCES** 

# Computing and Information Science

## WHY STUDY COMPUTING AND INFORMATION SCIENCE AT UMAINE?

Computing and information science pervades all aspects of modern society and graduates of the School of Computing and Information Science are in high demand in Maine and around the country. With a computer science degree you will understand and realize the potential of computation, and design and build information systems, networks and computational platforms that advance knowledge and benefit society.

The School of Computing and Information Science educates students in the foundations of the field and exposes them to cutting-edge research. Our labs and facilities offer state-of-the art and accessible learning environments where students can work individually and with others in exploring the various aspects of computing and information science. Students can undertake research in new areas, such as mobile systems, wireless sensor networks, robotics and autonomous agents, new modes of human computer interaction, cybersecurity and spatial informatics.

## WHAT CAN I DO WITH AN UNDERGRADUATE DEGREE IN COMPUTER SCIENCE?

Computer science graduates are in extremely high demand in today's job market and the U.S. Bureau of Labor Statistics predicts that the demand will continue to grow this decade. Skills and knowledge obtained through our degree programs can be applied to address scientific, biomedical and health challenges, help in the design of efficient energy systems, address system security and privacy, and make systems easier for people to use, among many other societal challenges. Graduates qualify for jobs in high-tech industries, software development firms, engineering consulting companies,

government agencies and research laboratories.

#### **OUR UNDERGRADUATE PROGRAM**

Our fully accredited undergraduate program provides training in computational thinking and action. The degree provides fundamental theoretical knowledge, along with knowledge of tools to solve real-world problems. Students can take electives in databases, high-performance computing, networks, artificial intelligence, robotics, human computer interaction and cybersecurity. Students can pursue game programming in more advanced courses that show how the tools to build exciting games are useful models for solving critical scientific and engineering problems.

#### **OPPORTUNITIES TO EXCEL**

Undergraduate students have the opportunity to participate in research experiences during the year or over the summer or participate in summer internships with local or regional companies.

UMaine regularly hosts or participates in regional cyberdefense competitions. Undergraduates can join the cyber defense team and participate in cybersecurity competitions.

#### **OUR GRADUATE DEGREE PROGRAMS**

The School of Computing and Information Science offers a broad range of graduate degrees, including M.S. degrees in computer science, information systems, spatial informatics, and spatial information science and engineering. The M.S. degrees provide an intensive course of study in areas of faculty research interest and a solid foundation for many advanced jobs in the field.

#### **ABOUT UMAINE**

The University of Maine, founded in Orono in 1865, is the state's premier public university. It is among the most comprehensive higher education institutions in the Northeast and attracts students from across the U.S. and more than 73 countries. It currently enrolls 11,286 total undergraduate and graduate students who can directly participate in groundbreaking research working with world-class scholars. The University of Maine offers doctoral degrees in 35 fields, representing the humanities, sciences, engineering and education; master's degrees in roughly 70 disciplines; 90 undergraduate majors and academic programs; and one of the oldest and most prestigious honors programs in the U.S. The university promotes environmental stewardship on its campus, with substantial efforts aimed at conserving energy, recycling and adhering to green building standards in new construction. For more information about UMaine, visit umaine.edu.

## explore

Bachelor of Science in Computer Science

Bachelor of Arts in Computer Science

Minor in Computer Science

Master of Science in Computer Science Information Systems Spatial Informatics Spatial Information Science and Engineering

Ph.D. in Computer Science Spatial Information Science and Engineering

Certificate in Geographic Information Systems Information Systems



The school offers ongoing education opportunities for practitioners in the field through distance education offerings. Students who are place-bound can obtain a M.S. in information systems or the graduate certificate in geographic information systems or information systems, all through distance courses.

Our Ph.D. program opens the door to rewarding and fulfilling careers in academia and industry. Ph.D. degrees are offered in computer science or spatial information science and engineering.

#### **OUR FACULTY**

Our faculty have international reputations for outstanding research and teaching in the fundamentals of computing, from new and emerging topics in intelligent autonomous agents, human-computer interaction, mobile computing, virtual and augmented reality, wireless sensor networks, to applying computation to important climate change problems.

#### HOW DO I APPLY?

Visit umaine.edu for an application, as well as information about academics and life at UMaine.

