

Computer Science and Engineering

Overview of the Major

This program produces graduates with a broad perspective in both software and hardware topics pertinent to computing systems. It provides the foundation and specialized knowledge necessary to analyze, design, and evaluate system software, utility programs, and software-hardware architectures. The program is supported by study in mathematics, science, and engineering. This allows students to design hardware and software solutions for a wide variety of application domains. Students gain hands-on experience in the laboratory courses accompanying classroom work and develop design skills in course work beginning in the first two years. Design experience continues in junior and senior years in the areas of software engineering and in applications areas of the student's choosing, culminating in the one-semester Senior Design Project course.

UConn Resources

- Department of Computer Science and Engineering
- Information Management Association
- Optical Society of America
- Society of Photonic Instrumentation Engineers
- Upsilon Pi Epsilon
- Engineering Student Leadership Council
- Tau Beta Pi
- Society of Hispanic Professional Engineers
- National Society of Black Engineers
- Women in Math, Science and Engineering
- Society of Women Engineers

Nature of Work

The rapid spread of computers and information technology has generated a need for highly trained workers to design and develop new hardware and software systems and to incorporate new technologies. These workers—computer systems analysts, engineers, and scientists—encompass a wide range of computer-related occupations. Computer Science and Engineering majors can have professions as computer professionals with a wide range of varying responsibilities, including designing computers and the software that runs them; developing information technologies; and developing and adapting principles for applying computers to new uses.

Other Resources

- IEEE Computer Society
- Association for Computing Machinery

Sample Job Titles

- Software Developer, Systems Software
- Software Developer, Applications
- Computer Systems Analyst
- Computer and Information Research Scientists
- Computer Security Specialist
- Web Developer
- Web Designer
- Project Leader
- Technical Writer
- Information Specialist
- Computer Programmer
- Computer and Information Systems Managers
- Computer User Support Specialist
- Network and Computer Systems Administrators
- Computer Hardware Engineer
- Database Administrator
- Applications Programmer
- Computer Consultant
- Systems Engineer
- Data Processing Manager