What can I do with my Major?

COMPUTER SCIENCE

OVERVIEW OF MAJOR

Computer Science is the formal study of what can be computed and what resources are required for computation, as well as the application of hardware, software, and human resources to solve computational problems. This major emphasizes development of applied skills in design, implementation, and validation of computer systems. Students acquire skills in the areas of computer science, computer systems, organization and architecture, algorithms and data structures, principles of software design, elements of the theory of computation, and operating systems.

NATURE OF WORK

Computer scientists design computers and the software that runs them, develop information technologies, and develop and adapt principles for applying computers to new uses. The jobs of computer scientists are distinguished by the higher level of theoretical expertise and innovation they apply to complex problems and the creation or application of new technology.

Computer scientists employed by academic institutions work in areas ranging from complexity theory to hardware to programming language design. Their counterparts in private industry work in areas such as applying theory, developing specialized languages or information technologies, or designing programming tools, knowledge-based systems, or even computer games.

SAMPLE JOB TITLES

Visit O*Net and conduct an Occupation Quick Search of each job title to learn more about that career path.

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

OTHER RESOURCES

- IEEE Computer Society
- Association for Computing Machinery

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