What can I do with a major in...

Computer science

ACTIVITIES COMPUTER SCIENCE MAJORS DO:
Computer science majors possess a broad variety of skills that make them valuable to businesses. Computer scientists come up with new ways of improving computers. They often work on a more abstract level than other computer professionals. Computer programmers write detailed instructions that list in order the steps that a computer must follow in order to accomplish any necessary task. They also conceive, design, and test logical structures for solving problems by computer. Many technical innovations in programming – advanced computing technologies, sophisticated new languages and programming tools – have redefined the role of a programmer and elevated much of the programmer work done today. Computer systems analysts plan and develop methods for computerizing business and scientific tasks or improving computer systems already in use. Network specialists schedule, arrange, and supervise the installation and maintenance of integrated computer systems and frequently give the expert knowledge necessary to analyze customer needs.

INDUSTRIES COMPUTER SCIENCE MAJORS WORK IN (SAMPLE LISTING):
Manufacturing
Digital communications
Factory automation
High speed computing
Automotive manufacturing
Software development
Information management
Aerospace
Healthcare
Federal safety agencies
Telecommunications
Environmental agencies
Finance industry
Hardware design
Industrial/food products
Medical technology
Systems Consulting
Computer aided design
Electrical hardware
Insurance
Consulting
Technology
Communication
Small business
Product development

EMPLOYERS WHO HIRE COMPUTER SCIENCE MAJORS (SAMPLE LISTING):
Amazon
Target Corp.
Securian Financial Group
Medtronic
Merck & Co.
Ecolab Incorporated
Alliant Tech Systems
Accenture
Apple Inc.
General Mills
Google
Caterpillar Incorporated
3M
Best Buy
Apple Inc.
EPIC
C. H. Robinson
Mayo Clinic
Eaton Corporation
Thomson Reuters
Honeywell
Dell Compellent
IBM
Microsoft Corporation
Open Systems International

TYPES OF POSITIONS FOR COMPUTER SCIENCE MAJORS (SAMPLE LISTING):
- **Computer programmer:** Writes, tests, and maintains the instructions that computers must follow to land airplanes, sell products online, build machines, share information, and more.
- **Computer systems analyst:** Creates new computer systems and improves existing technology and business processes. They start by deciding what hardware and software will be needed, then develop/adapt software to meet those needs.
- **Computer support specialist:** Provides technical assistance to computer system users in person, via phone or from remote location. Computer support specialists provide assistance concerning the use of computer hardware and software, including printing, installation, software, electronic mail, and operating systems.
- **Database administrator:** Organizes, tracks, and stores information for businesses and other organizations. Database administrators also design and coordinate database security systems.
- **High school teacher:** Prepares students for the work world or college. Teachers also try to inspire a lifelong love of learning in their students.
- **Network systems and data communications analysts/specialists:** Plans, designs, builds, maintains, and tests networks and other data communications systems.

**Some of these positions may require an advanced degree.**
USEFUL WEBSITES FOR COMPUTER SCIENCE MAJORS:

Department of Computer Science and Engineering cs.umn.edu
Computer Work computerwork.com
OdinJobs odinjobs.com
Software Developer softwaredeveloper.com
Computer Science Unplugged csunplugged.org
Computing Careers acm.org

PROFESSIONAL ORGANIZATIONS:

American Association of Artificial Intelligence aaai.org
Association for Computing Machinery acm.org
NSSN: A National Resource for Global Standards nssn.org
Institute of Electrical and Electronics Engineers (IEEE) ieee.org
IEEE – Computer Society computer.org

*Additional job/internship search websites and resources can be found at cse.umn.edu/career.

Information on this page was compiled from the Occupational Outlook Handbook, the Encyclopedia of Careers and Vocational Guidance, University of Minnesota departmental websites, and student-reported data.