



COLLEGE MAJORS AND CAREERS

Computer & Information Science

What is Computer & Information Science?

Computer and information science focuses on the design, application, and effectiveness of computers and information technology. A professional working in this area analyzes and develops effective methods to solve problems utilizing computer hardware and software. This includes management, implementation and dissemination of information. Theorists, designers, or inventors in this field have the ability to conduct research about fundamental computer and information science.

Marketable Skills of Computer and Information Science Majors

- Proficiency with computers and knowledge of latest technology
- Written and oral communication skills
- Ability to organize, analyze and interpret data
- Ability to evaluate problems and make appropriate decisions and recommendations
- Ability to cope with constant change
- Ability to meet deadlines
- Mathematical inclination and enjoyment of analytical thinking
- Ability to think out-of-the-box

Related Careers and Hiring Institutions

Computers have permeated every part of our daily lives and are essential components of operations throughout almost every industry. Careers in the field include Computer Engineering, Computer Forensics, Computer Networking, Computer Programming, Computer Graphics, Computer Systems Analyst, Educator, Games and Design Development, Information Assurance, Information Technology, Management Information Systems, Multimedia, Network Management, Network Security, Software Engineering, Technical Writing, Telecommunications, Web Design, and Information Systems.

The rapid spread of computers and information technology has generated a need for highly trained workers proficient in various job functions in most industries. In addition to technical skills, companies seek candidates with a diversified range of skills incorporating communication and interpersonal skills. Work can often be done from remote locations. Employment may be found in academic institutions, healthcare, government, consulting firms, manufacturer, computer or software companies. Many people can develop advanced computer experience in a non-computer occupation and transfer those skills to occupations in the areas of financial services and management.

According to the Bureau of Labor Statistics, Computer Software Engineers, Computer Systems Analysts and Network and Computer Systems Administrators are each projected to be among the 10 fastest growing occupations through 2014. All ideally require a Bachelor's degree and are rated as paying high wages.

Here is a brief list of institutions and organizations that have hired computer and information science majors. Please note that further education/experience may be required for some of these occupations:

- Banks
- Colleges and Schools
- Community Organizations
- Computer Service Providers
- Computer Vendors
- Consulting Firms
- Engineering Companies
- Financial Organizations
- Governmental Agencies
- Hospitals
- Insurance Companies
- Large Corporations
- Online Computer Service Companies
- Research Institutions
- Software Vendors
- Utility and Phone Companies
- Web Site Development Companies

Professional Organizations

Association for Computing Machinery

www.acm.org

Computing Research Association

www.cra.org

New York Software Industry Association

www.nysia.org

Women in Technology International

www.witi.com

Association of Information Technology Professionals

www.aitp.org

Institute of Electrical and Electronic

www.computer.org

Engineer Computer Professionals

Need More Information?

Brooklyn College's Department of Computer and Information Science:

2109 Ingersoll Hall, <http://www.sci.brooklyn.cuny.edu/cis>

Email: cis@sci.brooklyn.cuny.edu, Phone: (718) 951-5657

For more information concerning career options for computer and information science, majors consult the following resources available in the Career Library, 1303 James Hall:

Burns, J.K. (2001). *Opportunities in Computer Careers*. Chicago, IL: VGM Career.

Henderson, H. (2004). *Career Opportunities in Computers and Cyberspace* (2nd ed.) New York, NY: Ferguson.

Morris, M.E.S. & Massie, P. (1998). *Cybercareers*. Mountain View, CA: Sun Microsystems.

Phifer, P. (2000). *College Majors and Careers* (4th ed.) Chicago, IL: Ferguson.

U.S. Department of Labor (2006). *Occupational Outlook Handbook*. (2006-2007 ed.) Indianapolis, IN: JIST.

Online Resources:

<http://www.cs.washington.edu/WhyCSE>

<http://computingcareers.acm.org/>

<http://career.brooklyn.cuny.edu/majors/default.html>

<http://www.worldwidelearn.com/technology-degree/index.html>

<http://magnercenter.myplan.com>

<http://online.onetcenter.org>

<http://www.bls.gov/oco>

<http://www.dice.com>

<http://www.computerjobs.com>

<http://www.justcomputerjobs.com>