What can I do with a major in…

Computer Science

Career Advisor: Ernie Ackermann, Trinkle Hall B21, 540-654-1320, email: ernie@umw.edu

GENERAL DESCRIPTION

The domain of computer science is the acquisition, organization, storage, retrieval, manipulation and dissemination of information with electronic computers. Concerns with machine architecture and behavior, as well as theoretical characterizations of their properties and limitations, are a part of the discipline as well.

Computer science is often considered a mathematical science since both disciplines deal with formalism and symbolic structures. Each is concerned with general methods and problem-solving techniques applicable to various situations. There are subjects, such as numerical analysis and discrete mathematics, which are studied in both disciplines. Majors are encouraged to take as much mathematics as possible; indeed, many end up majoring in both fields. There is also an area of overlap between computer science and fields like library science, philosophy, psychology, linguistics, and decision-making (e.g., business administration; financial planning).

Employment prospects for computer science graduates are better than average. However, potential employers have become much more selective; students with marginal GPA's may find employment difficult to obtain. On the other hand, industry does reward quality graduates with better-than-average starting salaries.

The job titles and hiring institutions which follow are meant to give you an idea of the careers available to computer science majors, however many other possibilities also exist. You are encouraged to explore all career paths that interest you.

POTENTIAL JOB TITLES

Accountant	Graphics
Air traffic controller	High tech headhunter
Analysts	Internet access provider
Animation coordinator	LAN specialist
Budget/management analyst	Market research analyst
Business/management trainee	Meteorologist
Cartographer	Navigator
CD-Rom producer	Network administrator
Computer program analyst	Operations researcher
Computer salesmen	Physicist
Computer security analyst	Pilot, airplane
Computer & information systems manager	Psychometrist
Cryptanalyst	Systems analyst/engineer
Cyber cafe owner	Teacher (secondary)
Database administrators	Technical illustrator/writer
Film editor	Virtual reality developer
Financial planner	Webmaster
Financial/investment analyst	Web page designer

REPRESENTATIVE HIRING INSTITUTIONS

Banks and investment firms	Government agencies
Business firms	Insurance companies
Colleges and universities	Market research departments/firms
Computer firms	Professional/technical journals
Dot.com organizations	Research & development firms
Educational institutions	Test development firms
Engineering firms	Utilities companies
Film studios	Weather bureaus

WHERE DO UMW COMPUTER SCIENCE MAJORS GO?

EMPLOYERS/INTERNSHIP SITES

- Planit Technology Group
- TASC
- The Tauri Group
- United States Navy
- Blazeware, Inc.

GRADUATE SCHOOLS

- Boston University, Graduate Certificate- Project Management
- George Washington University, Ph.D. in Mathematics
- George Washington University, Master of Science in Computer Science with a focus in Computer Graphics
- Georgetown University- The McDonough School of Business, MBA in International Business
- University of California, Davis, Ph.D. in Applied Mathematics
- University College Cork, MSc in Applied Science (Software & Systems for Mobile Networks) Computer Science
- University of Mary Washington, MSMIS
- Virginia Commonwealth University, Master of Science in Computer Science

FOR MORE INFORMATION CONTACT

1. American Mathematical Society: www.ams.org
2. Am. Society for Information Science: www.asis.org
3. The League of Professional Systems Administrators (LOPSA): http://lopsa.org/
4. Association for Computing Machinery: www.acm.org
5. Mathematical Association of America: www.maa.org

The Office of Career Services also maintains a resource library with a variety of books and other printed material where students can access additional information about their major or field of interest. Visit us in Lee Hall, Room 308 to learn more.