

Roanoke College
Department of Mathematics/Computer Science/Physics
Computer Science Career Advising Guide

MAJORS	SKILLS/ATTRIBUTES	RELATED OCCUPATIONS	EXTRACURRICULAR ACTIVITIES
Applied Computer Science B.S. Computer Science B.S.	Problem solving Logical reasoning Aptitude for abstract Ability to analyze Attention to detail and accuracy Patience and persistence Creativity Communication skills (both oral and written) Interpersonal skills (teamwork) Self-motivated Ability to adapt to new ideas and technologies Ability to learn on one's own	Programmer/Analyst --Applications Programmer --Systems Programmer Software Engineer Systems Analyst Network Analyst Director of Computer Operations Software Package Developer Educator Database Administrator	RCSCACM (Student Chapter of the Association for Computing Machinery)

Computer Science is a discipline that brings a scientific perspective to the study of computational machines and computational processes (algorithmic processes). A computer system involves everything from the user of the computer to the programs that control the computer down to the chips containing the electronic circuitry of the computer. Computer-related jobs are available along the entire spectrum. The computer scientist is primarily concerned with the software aspect of computing—from user interface design and development of systems programs that control the operation of the computer, to theoretical studies of programming languages and computation. The hardware side of computers, such as computer circuit design, is more in the domain of computer or electrical engineering. Applied majors such as Computer Information Systems deal more with applications of computer systems in the business environment.

Average Starting Salary: \$57,000

Employment Outlook: Excellent, see <http://www.computingcareers.acm.org> for more information

Recommended Preparation: Completion of the B.S. in Computer Science or completion of a degree in an area such as mathematics, physics, chemistry, business, or physics with a minor in Computer Science. Extra mathematics and science courses are recommended for application areas such as scientific computing. Extra business courses (or a major in Computer Information Systems) are recommended for applications in business.