

COMPUTER SCIENCE

What can I do with this major?

The field of computer science is constantly changing. The areas listed below do not exhaust possible career options.

See also *What Can I Do With This Major in Management Information Systems*.

AREAS

EMPLOYERS

STRATEGIES

PROGRAMMING

Systems
Scientific Applications
Business Applications
 Intelligence
 Warehousing
 Information Delivery
 Maintenance
Project Management

Computer vendors
Software and computer companies
Any large organization including:
 Banks, retail chains, manufacturers,
 universities, and government agencies
Management consulting firms
Contract and temporary employers
Research laboratories

Gain relevant experience through internships or co-ops.
Develop an attention to detail and a flair for creativity.
Learn to work well with a team and to meet deadlines.
Supplement computer degree with courses in business, science, or engineering.
Stay current on programming languages.
Earn a master's degree for upper level positions.
Seek the Certified Computing Professional designation by completing a series of exams and experiential requirements.

SYSTEMS DEVELOPMENT

Analysis
Design
Support
Quality Assurance
Specialty Systems
 Database
 Client-Server
 Expert

Banks and financial institutions
Insurance companies
Consulting firms
Manufacturers
Local, state, and federal government
Computer companies
Research institutions

Develop strong interpersonal skills. Learn to communicate effectively with technical and non-technical colleagues.
Gain programming experience. Many analysts begin their careers as programmers.
Become an effective problem solver.
Take business courses. Earn an M.B.A. degree for advanced positions.
Plan to continually educate self on new computer languages and technology.

NETWORK TECHNOLOGY

Installation and Maintenance
Administration

Variety of organizations and industries

Work in university computer labs.
Develop good communication skills and an interest in helping others.
Gain knowledge in a variety of computer areas including minor programming, software, and hardware.
Stay abreast of the latest technology and software.
Earn certifications in networking and computer security.

AREAS

EMPLOYERS

STRATEGIES

INTERNET

Programming
Software Design
Systems Analysis
Hardware Production
Web Page Design

Network access points
Backbone operators
Online service providers
Internet service providers
Computer/equipment vendors
Internet-related companies including:
 Browsers
 Search engines
 Website design services
Large businesses

Gain experience as a webmaster through part-time jobs, internships, or volunteering to design web pages for student organizations.
Learn web-related programming languages.
Take graphic design courses to develop creativity.
Learn to communicate and work well with others in a team by participating in group projects or student organizations.
Earn a master's degree in computer science for advanced opportunities in programming, analysis, or hardware/software design.

CONSULTING

System Installation
System Implementation
Training

Consulting firms
Self-employed

Obtain a strong technical knowledge of computers, a background in business management, and experience as a systems analyst.
Learn various programming languages and operating systems.
Develop exceptional analytical and interpersonal skills.

EDUCATION

Teaching
Instructional Technology

Public and private schools, K-12
Colleges and universities

Certification required for public school teaching.
Earn a doctoral degree in computer science for post-secondary teaching.
Earn a graduate degree in information technology or a related field for instructional technology.
Develop a research specialty for university teaching.
Gain experience working with other students through tutoring or positions in computer labs.

NON-TECHNICAL

Customer/Product Support
Technical Writing
Sales and Marketing

Software/hardware manufacturers
Retail stores
Software vendors

Develop excellent communication skills and an interest in helping customers solve problems.
Work in university computer labs.
Supplement curriculum with technical writing courses to develop skills.
Seek related work experiences.

GENERAL INFORMATION

- Complete informational interviews with current computer science professionals to help establish career goals.
- Having related experience is critical to most employers that hire computer science majors. Obtain an internship, co-op, or part-time job in a relevant area to increase employability.
- Obtain vendor specific certifications or networking certifications to gain a competitive edge.
- Develop strong interpersonal, communication, and other “soft skills.” Learn to work well on a team.
- Programming and consulting may go hand-in-hand. Many occupations in these areas have responsibilities that overlap.