

# COMPUTER SCIENCE

## What can I do with this degree?

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

### 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 lan-  
 guages 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.