

Computer Science

What can I do with this major?

| OCCUPATIONS | EMPLOYERS | SKILLS TO DEVELOP |
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| <p><u>PROGRAMMING</u></p> <ul style="list-style-type: none"> Systems Scientific Applications Business Applications <ul style="list-style-type: none"> Intelligence Warehousing Information Delivery Maintenance Project Management | <ul style="list-style-type: none"> Computer vendors Software and computer companies Any large organization including: <ul style="list-style-type: none"> Banks, retail chains, manufacturers, universities, and government agencies Management consulting firms Contract and temporary employers Research laboratories | <ul style="list-style-type: none"> • Gain relevant experience through internships. • 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 or science • 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. |
| <p><u>SYSTEMS DEVELOPMENT</u></p> <ul style="list-style-type: none"> Analysis Design Support Quality Assurance Specialty Systems <ul style="list-style-type: none"> Database Client-Server Expert | <ul style="list-style-type: none"> Banks and financial institutions Insurance companies Consulting firms Manufacturers Local, state, and federal government Computer companies Research institutions | <ul style="list-style-type: none"> • 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. |
| <p><u>NETWORK TECHNOLOGY</u></p> <ul style="list-style-type: none"> Installation and Maintenance Administration | <ul style="list-style-type: none"> Variety of organizations and industries | <ul style="list-style-type: none"> • Develop good communication skills and an interest in helping others. • Work in university computer labs. • 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. |
| <p><u>CONSULTING</u></p> <ul style="list-style-type: none"> System Installation System Implementation Training | <ul style="list-style-type: none"> Consulting firms Self-employed | <ul style="list-style-type: none"> • 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. |

OCCUPATIONS**EMPLOYERS****SKILLS TO DEVELOP****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.

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.
- Learn to communicate effectively with technical and non-technical people.
- Work in university computer labs.
- Supplement curriculum with technical writing courses to develop skills.
- Seek related work experiences.

EDUCATION

Teaching
Instructional Technology

Private and public secondary schools
Colleges and universities

- Obtain certification/licensing for teaching in public schools.
- Acquire a master's degree for community college teaching and a Ph.D. for colleges and universities.
- Gain volunteer experience with Big Brother/Sister program, tutoring, sports, summer camps, teen counseling, childcare centers, or with other special populations.
- Learn how to develop curriculums and workshops.
- Gain experience as a tutor, camp counselor, church schoolteacher, etc.

Strategies For Placement In Computer Science

- The field of computer science is constantly changing. Keep up with trends in the industry through professional organizations and publications.
- 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 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.

Internet Resources:

Vault: more information on the every day life of a web designer, and computer consultant. This site is accessible through the Career Services Website: www.capital.edu/careers

Career Profile – Computers: www.wetfeet.com/asp/careerlist.asp

WetFeet.com guide to Computer Industry: covers Industry Trends & Overview, "Love-Hate" (pros and cons of this field), Major Players and Job Descriptions & Tips.

Computer Society

www.computer.org/education/careers