

## What can I do with a major in Computer Science?

## Overview

- The study of computer science prepares an individual to enter a fast-growing, exciting and ever-changing profession. Using computer systems, students design and implement solutions to problems that exist in all domains.
- Computer science is primarily concerned with the study of algorithms. An algorithm is a sequence of unambiguous steps that performs a task. Computer hardware and software are developed to test and implement algorithms. So, computer science involves problem solving using computer algorithms. The scope of the discipline is broad, drawing from mathematics, engineering, business administration, psychology, linguistics, art and others.

Career Titles		
■ Account Executive	<ul> <li>Database Manager</li> </ul>	<ul> <li>Operating Systems Programmer</li> </ul>
■ Actuary	<ul><li>Demographer</li></ul>	<ul> <li>Operations Manager</li> </ul>
■ Aerospace Engineer	<ul> <li>Design Engineer</li> </ul>	<ul> <li>Operations Research Analyst</li> </ul>
Air Traffic Controller	Disney Imagineer	■ PC Support Specialist
■ Analyst	<ul> <li>Document Specialist</li> </ul>	■ Production Manager
■ Animator	<ul> <li>Documentation Librarian</li> </ul>	■ Professor
<ul> <li>Applications Programmer</li> </ul>	<ul><li>Drafter</li></ul>	<ul><li>Programmer</li></ul>
<ul> <li>Artificial Intelligence Specialist</li> </ul>	<ul><li>Econometrician</li></ul>	■ Project Manager
■ ATM Specialist	<ul> <li>Electronic Data Processing Auditor</li> </ul>	■ Quality Assurance Analyst
<ul><li>Auditor</li></ul>	<ul> <li>Engineering Lab Technician</li> </ul>	<ul><li>Research Analyst</li></ul>
<ul> <li>Auxiliary Equipment Operator</li> </ul>	<ul><li>Entrepreneur</li></ul>	■ Risk Analyst
<ul> <li>Business Credit/Loan Administrator</li> </ul>	<ul> <li>Environmental Technologist</li> </ul>	<ul> <li>Robotics Programmer</li> </ul>
■ CAD/CAM Designer	<ul><li>Equipment Dealer</li></ul>	<ul> <li>Satellite Communications</li> <li>Specialist</li> </ul>
<ul><li>Chief Information Officer</li></ul>	<ul><li>Fabricator</li></ul>	<ul><li>Service Technician</li></ul>
■ CIA Agent (Computer Specialist)	<ul><li>Game Designer</li></ul>	<ul> <li>Software Developer</li> </ul>
<ul><li>Circuit Designer</li></ul>	<ul><li>Game Tester</li></ul>	<ul> <li>Software Development Consultant</li> </ul>
■ Coder	<ul> <li>GIS Developer</li> </ul>	<ul> <li>Software Engineer</li> </ul>
<ul> <li>Communications Control Technician</li> </ul>	■ Graphic Designer	<ul> <li>Software Support Specialist</li> </ul>
■ Computer Aided Designer	<ul> <li>Graphics Design Operator</li> </ul>	<ul> <li>Special Effects Designer</li> </ul>
<ul> <li>Computer Applications Engineer</li> </ul>	<ul> <li>Hardware Engineer</li> </ul>	<ul><li>Specification Writer</li></ul>
■ Computer Consultant	<ul> <li>Hardware Service Technician</li> </ul>	<ul><li>Statistician</li></ul>
<ul> <li>Computer Engineer</li> </ul>	<ul> <li>Information Broker</li> </ul>	<ul><li>Systems Analyst</li></ul>
<ul> <li>Computer Equipment Analyst</li> </ul>	<ul> <li>Information Systems Auditor</li> </ul>	<ul><li>Systems Integrator</li></ul>
<ul> <li>Computer Equipment Sales</li> </ul>	<ul> <li>Information Systems Manager</li> </ul>	<ul> <li>Systems Level Designer</li> </ul>
<ul> <li>Computer Facilities Manager</li> </ul>	<ul><li>Information Technology Coordinator</li></ul>	<ul> <li>Systems Maintenance Specialist</li> </ul>
<ul> <li>Computer Programmer</li> </ul>	<ul><li>Internet Consultant</li></ul>	<ul><li>Systems Programmer</li></ul>
<ul> <li>Computer Research Scientist</li> </ul>	<ul> <li>Internet Information Authenticator</li> </ul>	<ul> <li>Systems Software Developer</li> </ul>
<ul><li>Computer Scientist</li></ul>	<ul> <li>Inventory Control Specialist</li> </ul>	<ul><li>Teacher</li></ul>
<ul> <li>Computer Security Specialist</li> </ul>	<ul> <li>LAN Administrator</li> </ul>	<ul><li>Technical Analyst</li></ul>
<ul> <li>Computer Service Technician</li> </ul>	<ul><li>Librarian</li></ul>	<ul> <li>Technical Sales Representative</li> </ul>
<ul><li>Computer Systems Manager</li></ul>	<ul> <li>Maintenance Programmer</li> </ul>	<ul> <li>Technical Support Specialist</li> </ul>
<ul> <li>Computer Test Specialist</li> </ul>	<ul> <li>Manufacturing Engineer</li> </ul>	<ul><li>Technical Writer</li></ul>
<ul> <li>Contract Programmer</li> </ul>	<ul> <li>Manufacturing Systems Specialist</li> </ul>	<ul> <li>Telecommunications Specialist</li> </ul>
Corporate Security Specialist	Market Research Analyst	Training Specialist
<ul> <li>Cost Estimator/ Analyst</li> </ul>	<ul><li>Mathematician</li></ul>	<ul> <li>Turnkey Contractor</li> </ul>



## OFFICE OF CAREER & PROFESSIONAL

DEVELOPMENT

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<ul><li>Cryptographer</li><li>Data Communications Analyst</li></ul>	<ul><li>Mortgage Researcher</li><li>Network Administrator</li></ul>	<ul><li>Usability Specialist</li><li>Video Specialist</li></ul>
<ul><li>Data Communications Analyst</li><li>Data Entry Operator</li></ul>	<ul><li>Network Administrator</li><li>Network Analyst</li></ul>	Web Designer
<ul> <li>Data Entry Operator</li> <li>Database Administrator</li> </ul>	<ul> <li>Network Analyst</li> <li>Network Programmer</li> </ul>	Web Programmer
<ul> <li>Database Administrator</li> <li>Database Design Analyst</li> </ul>	<ul><li>Network Frogrammer</li><li>Numerical Analyst</li></ul>	Web Programmer     Webmaster
- Database Design Analyst	- Numerical Analyst	- Webliaster
Employers		
Accounting Firms	■ Department of Labor	<ul> <li>Nonprofit Organizations</li> </ul>
<ul> <li>Aerospace Industry</li> </ul>	<ul> <li>Department of Transportation</li> </ul>	<ul> <li>Online Service Providers</li> </ul>
• Airlines	<ul> <li>Department of Treasury</li> </ul>	<ul> <li>Pharmaceutical Companies</li> </ul>
<ul> <li>Automotive Industry</li> </ul>	<ul> <li>Electronics Manufacturers</li> </ul>	■ Power Industry
■ Banks	<ul><li>Engineering Firms</li></ul>	<ul> <li>Professional &amp; Technical Journals</li> </ul>
Brokerage Houses	■ FBI/CIA	<ul> <li>Research &amp; Development Firms</li> </ul>
<ul> <li>Colleges/Universities</li> </ul>	<ul> <li>Federal Trade Commission</li> </ul>	<ul><li>Retail Stores</li></ul>
Commodity Futures Trading Commission	■ Financial Firms	<ul><li>School Districts</li></ul>
<ul> <li>Communications Companies</li> </ul>	<ul><li>Hospitals</li></ul>	<ul><li>Schools</li></ul>
Computer Development Firms	■ Insurance Companies	<ul> <li>Securities and Exchange Commission</li> </ul>
<ul> <li>Computer Hardware &amp; Software Vendors</li> </ul>	■ Internal Revenue Service	■ Software Development Firms
Construction Firms	<ul> <li>International Trade Administration</li> </ul>	<ul> <li>Technology Companies</li> </ul>
<ul> <li>Consulting Firms</li> </ul>	<ul> <li>Internet Companies</li> </ul>	<ul> <li>Telecommunications Firms</li> </ul>
Credit Unions	■ Investment Banking	<ul> <li>Test Development Corporations</li> </ul>
<ul> <li>Data Processing Firms</li> </ul>	<ul> <li>Local, State, Federal Government</li> </ul>	■ Transportation Companies
■ Department of Agriculture	<ul> <li>Manufacturing Firms</li> </ul>	<ul> <li>US Information Agency</li> </ul>
<ul> <li>Department of Commerce</li> </ul>	<ul> <li>Market Research Firms</li> </ul>	<ul><li>Utility Companies</li></ul>
<ul> <li>Department of Defense</li> </ul>	<ul><li>Military</li></ul>	<ul> <li>Veterans Administration</li> </ul>
<ul><li>Department of Energy</li></ul>	<ul> <li>National Aeronautic and Space Administration</li> </ul>	<ul> <li>Video Game Companies</li> </ul>
<ul> <li>Department of Justice</li> </ul>	<ul> <li>National Security Agency</li> </ul>	<ul> <li>Weather Bureaus</li> </ul>
Skills		
Ability to analyze and solve	<ul><li>Critical thinking</li></ul>	<ul> <li>Programming language concepts</li> </ul>
complex problems in a variety of application domains	Citical tilliking	rogramming ranguage concepts
Ability to concentrate and pay close attention to detail	<ul><li>Design systems</li></ul>	<ul> <li>Reasons abstractly, observes keenly, and concentrates intensely</li> </ul>
Ability to master new computer languages	■ Efficiency	■ Research
Ability to speak and write clearly	<ul> <li>Knowledge of operating systems</li> </ul>	<ul> <li>Skill to communicate ideas and relationships through words and numbers</li> </ul>
<ul> <li>Ability to work well as part of a team</li> </ul>		Statistical analysis
Abstract and formal reasoning	<ul> <li>Mathematical skills</li> </ul>	<ul> <li>Stay abreast of advancements in the area of computer science</li> </ul>
<ul> <li>Adapt ideas</li> </ul>	<ul><li>Multi-tasking</li></ul>	Systematic
<ul> <li>Advanced quantitative abilities</li> </ul>		<ul> <li>Thinking independently</li> </ul>
Analytical skills	<ul> <li>Possesses computational ability</li> </ul>	■ Thoroughness
<ul> <li>Analyze complex ideas</li> </ul>	<ul> <li>Precise analytical reasoning</li> </ul>	<ul> <li>Understands computer language,</li> </ul>
-	-	equipment, and application programs



<ul> <li>Appreciation for accuracy and detail</li> </ul>	■ Problem-solving	■ Work independently and in teams
<ul> <li>Argue logically</li> </ul>		

## **Salary**

NACE (National Association of Colleges and Employers) Summer 2012 Salary Survey Average Offers:

■ Computer Science Bachelor's Degree: \$58,300

The job titles and employers listed below are a sample of the results from the annual St. Norbert College Career Services graduate follow-up survey for the Classes of 2003-2010.

Graduate Information: Job Titles		
■ Business System Developer	■ IT Specialist	<ul><li>Sales Engineer</li></ul>
<ul><li>Computer Programmer</li></ul>	<ul> <li>Medical Records Department</li> </ul>	<ul> <li>Software Engineer</li> </ul>
■ Computer Scientist	<ul><li>Network Specialist</li></ul>	<ul><li>Support Desk Intern</li></ul>
<ul><li>Entry-Level Programmer</li></ul>	<ul><li>Order Entry Associate</li></ul>	<ul><li>Support Technician</li></ul>
■ Flash Developer	<ul><li>Programmer</li></ul>	<ul> <li>Technology Consultant</li> </ul>
<ul><li>Information Systems Intern</li></ul>	<ul><li>Programmer Analyst</li></ul>	<ul><li>Underwriter</li></ul>
■ IT Assistant	<ul> <li>Quality Assurance Technician</li> </ul>	<ul> <li>Web Developer</li> </ul>
■ IT Consultant		

Graduate Information: Employers			
<ul><li>Akaio</li></ul>	■ Gannett Wisconsin	<ul> <li>Rowdan Enterprises</li> </ul>	
<ul> <li>American Medical Security</li> </ul>	<ul><li>GE Healthcare</li></ul>	<ul><li>SchoolCenter</li></ul>	
■ Anamax	<ul><li>Greatland Corporation</li></ul>	<ul><li>Schreiber Foods</li></ul>	
<ul> <li>Broadcast Interactive Media</li> </ul>	<ul> <li>Guardian Life Insurance</li> </ul>	<ul><li>ShopKo</li></ul>	
<ul><li>Century Insurance</li></ul>	<ul><li>Infinite Technology</li></ul>	<ul><li>Walgreens</li></ul>	
<ul><li>CSD Storage Systems</li></ul>	<ul><li>Lawerence University</li></ul>	<ul> <li>Waterstone Group</li> </ul>	
<ul><li>CUNA Mutual</li></ul>	■ LP Switch	<ul><li>Zyquest</li></ul>	
<ul><li>Eastbay</li></ul>	<ul> <li>Marshfield Clinic</li> </ul>		
• Frabill Inc.	<ul> <li>Northland Lutheran Retirement</li> </ul>		
	Community		