



What can I do with a major in **COMPUTER SCIENCE** from Valparaiso University?

Description of major:

As a data processing tool, the computer has made possible extending both numerical manipulation and forms of language communication far beyond ordinary human capabilities. Computing has developed languages of its own to ease the human-machine interface. Learning how best to use these languages and to design strategies for problem solving are major objectives of computer science. Computer science also studies computer design and computer architecture and the integration of computer components into systems.

Relevant skills for a COMPUTER SCIENCE major:

- ◆ Analyze communication situations
- ◆ Anticipate problems before they arise
- ◆ Are detail-oriented
- ◆ Are systematic
- ◆ Can multi-task
- ◆ Classify/systemize
- ◆ Communicate verbally and in writing
- ◆ Conduct statistical analysis
- ◆ Critique
- ◆ Design systems
- ◆ Diagnose
- ◆ Have advanced quantitative abilities
- ◆ Have mathematical skills
- ◆ Interview customers/clients
- ◆ Know operating systems
- ◆ Make decisions
- ◆ Market concepts
- ◆ Operate efficiently
- ◆ Organize/simplify
- ◆ Perceive/define cause and effect relationship
- ◆ Recognize elements, relationships, structures and organizing principles
- ◆ Research
- ◆ Review large amounts of material and extract essence
- ◆ Screen
- ◆ Separate "wheat from chaff"
- ◆ Solve problems
- ◆ Survey
- ◆ Test
- ◆ Think logically
- ◆ Trace problems to their sources
- ◆ Trouble-shoot
- ◆ Understand programming language concepts
- ◆ Work independently and in teams
- ◆ and others!

Sample work activities for Graduates in COMPUTER SCIENCE (some may require an advanced degree)

- Actuary
- Air Traffic Controller
- Applications programming
- Applied Science Technologist
- Artificial Intelligence Programmer
- Computer Consultant
- Computer Engineer
- Computer Facilities Manager
- Computer Installation & Test Specialist
- Computer Marketing/Sales
- Computer Programmer
- Consultant
- Cryptographer/Cryptologist
- Data Control Administrator
- Data Processing Manager
- Database Manager
- Econometrician
- EDP Auditor
- Information Scientist
- Inventory Control Specialist
- ISO 2000 Specialist
- LAN administrator
- Mathematician
- Network Programmer
- Numerical Analyst
- Operations Research Analyst
- Production Manager
- Programmer Analyst
- Programming Supervisor
- Psychometrician
- Quality Assurance Analyst
- Rate Analyst
- Research Analyst
- Risk & Insurance Specialist
- Robotics Programmer
- Satellite Communications Specialist
- Software Developer
- Software Engineer
- Software Support Specialist
- Statistician
- Systems Analyst
- Systems Engineer
- Systems Programmer
- Teacher: Science/Math/Computers
- Technical Support Representative
- Technical Writer
- Transportation Planner
- Underwriter
- Value Engineer
- and others!

Potential hiring institutions for COMPUTER SCIENCE majors:

- ◆ Accounting Firms
- ◆ Airlines
- ◆ Banks and investment firms
- ◆ Business & industry
- ◆ College and Universities
- ◆ Computer Development Firms
- ◆ Computer Hardware Companies
- ◆ Consulting Firms
- ◆ Data Processing Service Firms
- ◆ Government Agencies
- ◆ Health Care Facilities
- ◆ Insurance Companies
- ◆ International agencies
- ◆ Internet providers
- ◆ Manufacturing Firms
- ◆ Military
- ◆ Network System Companies
- ◆ Professional & technical journals
- ◆ Public Utility Firms
- ◆ Research & Development Departments
- ◆ Research Organizations
- ◆ Retail Businesses
- ◆ Schools
- ◆ Software Development Firms
- ◆ Technology Companies
- ◆ Telecommunications
- ◆ Training companies
- ◆ Transportation Firms
- ◆ Universities/Colleges
- ◆ Web-based companies
- ◆ Wholesale Businesses and others!

Area of further education for BIOLOGY majors:

- Accounting
- Actuarial Science
- Applied Mathematics
- Applied Science & Technology
- Artificial Intelligence/Robotics
- Astrophysics
- Atmospheric Science
- Biometrics
- Biostatistics
- Computational Sciences
- Computer Engineering
- Computer Science
- Education
- Electrical Engineering
- Electronic Commerce
- Engineering
- English
- Finance
- Financial Engineering
- Human-Computer Interaction
- Information Science
- Information Studies
- Law
- Management Information Systems
- Marketing Research
- Mathematics
- Medical Informatics
- Operations Research
- Physics
- Quantitative Analysis
- Radio/TV/Film
- Religion/Theology
- Software Engineering
- Statistics
- Systems Science
- Technology & Public Policy
- Telecommunications and others!

Sources of additional information for COMPUTER SCIENCE majors:

- ◆ VU Department of Math & Computer Science, Computer Science major: <http://www.valpo.edu/mathcs/cscnts.html>
- ◆ Occupational Outlook Handbook: the US Bureau of Labor Statistics compiles information about various occupations, including the nature of the work, the job outlook, the earnings, and other relevant information. <http://www.bls.gov/oco/oco1002.htm>
- ◆ Association for Computer Machinery: the world's first educational and scientific computing society. Site includes Career Opportunities. <http://info.acm.org/>
- ◆ Association for Women in Computing: a non-profit professional organization for women and men who have an interest in information technology. The Association is dedicated to the advancement of women in the technology fields. <http://www.awc-hq.org/>
- ◆ Computer.Org: Technical and career resources for the computer professional sponsored by the Institute of Electrical and Electronics Engineers (IEEE) Computer Society. Site includes a career information and a Career Services Center. <http://computer.org/>
- ◆ Computerwork.com: a job search center for technical professionals offering permanent, contract, and consulting jobs nationwide. <http://computerwork.com/>
- ◆ Information Week Career Page: Includes jobs, career fairs and salary information. <http://www.informationweek.com/career2/>
- ◆ Institute for the Certification of Computer Professionals: dedicated to the establishment of high professional standards for the computer industry. Actively promote these standards by offering the only broadly applicable and internationally recognized certification program in the profession. <http://www.iccp.org/>

- ◆ International Webmasters Association: the industry's recognized leader in providing educational and certification standards for Web professionals. <http://www.iwanet.org/>
- ◆ Jobs for Programmers: Job opportunities in programming <http://www.prgjobs.com>

VU Career Center Resource Library Materials:

- *Book of U.S. Government Jobs: Where They Are, What's Available, and How to Get One*
- *Career Opportunities in Computers and Cyberspace*
- *Careers for Number Crunchers & Other Quantitative Types*
- *Essays that Worked for Business Schools*
- *Essays that Worked for Law Schools*
- *GMAT 2003*
- *Graduate Admissions Essays: Write Your Way into the Graduate School of Your Choice*
- *Graduate Programs in Engineering and Computer Science*
- *Graduate Programs in Physical Sciences*
- *Graduate Schools in the U.S*
- *GRE Exam 2003*
- *Great Jobs for Engineering Majors*
- *Guide to America's Federal Jobs*
- *How to Write a Winning Personal Statement for Graduate and Professional School*
- *Job Surfing: The Sciences – Research & Medicine*
- *LSAT 2003*
- *Opportunities in Aerospace Careers*
- *Opportunities in Computer Careers*
- *Opportunities in Government Careers*
- *Opportunities in Law Careers*
- *Opportunities in Technical Sales Careers*
- *Peterson's Game Plan for Getting into Business School*
- *Peterson's Game Plan for Getting into Graduate School*
- *Peterson's Game Plan for Getting into Law School*
- *Peterson's Graduate & Professional Programs, An Overview*
- *Peterson's Graduate Programs in Business, Education, Health, Information Studies, Law & Social Work*
- *Peterson's Graduate Programs in Engineering & Applied Sciences*
- *Peterson's Graduate Programs in the Physical Sciences, Mathematics, Agricultural Sciences, the Environment & Natural Resources*
- *Resumes for Computer Careers*
- *Resumes for Engineering Careers*
- *Resumes for High-Tech Careers*
- *Resumes for Scientific and Technical Careers and others!*

For more information about majoring in COMPUTER SCIENCE, contact:

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For more questions about your career decisions, please make an appointment with a VU Career Counselor by calling 464-5005, stopping by the Career Center in Alumni Hall or e-mailing us at Career.Center@valpo.edu
