

# Computer Science and Information Systems Careers

University of Wisconsin-River Falls

## Career Preparation For Computer Science And Information Systems Majors

**A** major in computer science provides professionals with a solid foundation in the general areas of organization, processing, utilization, and communication of information. Within these areas, the trained computer scientist can elect to specialize in many sub-areas, which can draw upon expertise in either software or hardware.

### Computer Science Option

This option has a technical and theoretical emphasis providing students comprehensive understanding of software engineering, computing techniques and the underlying theories. Graduates will develop skills relevant to the analysis, design, and implementation of sophisticated software/hardware systems and communication networks.

### Computer Information Systems Option

The analysis and design of information systems with an emphasis on managing, storing, transmitting, and providing ready access to information is the key to the CIS option. Graduates will develop skills relevant to the analysis, design, and implementation of sophisticated information systems.

## RELATED MAJOR SKILLS

### Organizing/Research Skills

- Gathering information
- Comparing and summarizing
- Problem solving
- Designing and directing projects
- Working in groups
- Organizational Skills
- Detailed analysis
- Writing and editing

### Problem Solving Skills

- Algorithm Development Ability
- Methodology of Problem Solving by computer
- Applications Programming in several languages
- Ability to master new computer languages and methodologies

### Critical Thinking Skills

- Adapting ideas
- Seeing connections
- Questioning conventions
- Arguing logically
- Generating new ideas
- Thinking independently
- Working with self-direction
- Precise analytical reasoning
- Statistical analysis



## CREATING OPPORTUNITIES IN YOUR MAJOR

- Talk with Career Services, faculty, and alumni about achieving your career goals
- Gain relevant experience through internships, part-/full-time jobs, and volunteer opportunities
- Work with Career Services and your departmental faculty coordinator for internship information
- Job shadow and conduct informational interviews with professionals in the field
- Utilize the Hire-a-Falcon Mentor Network
- Learn how to write technical reports
- Have the ability to work alone or as part of a team
- Have a proficiency in computer languages
- Prepare electronic data files
- Obtain experience processing data on computers
- Work part-time or as a volunteer in a computer firm or computer science department
- Repair electronic appliances and other mechanical gadgetry
- Join a computer club or organization
- Read computer publications and be up-to-date on new computer technology
- Consider having a double major in business or accounting for business applications or in math or engineering for scientific applications
- Consider getting your MBA for promotion to management
- Get experience as programmer, systems analyst, or web designer
- Use the campus web space, create your own web page and web portfolio
- Obtain a position with IT Services or Frednet
- Become a member of TLC (Technology Leadership Cadre)
- Get involved with the student ACM (National Association for Computing Machinery)

## CAREER OPPORTUNITIES

### Application Development

Application Consultant  
Programmer Analyst/ Senior Programmer Analyst  
Senior Information Application Consultant\*  
Systems Analyst/ Senior System Analyst\*

### Management

Database Manager  
Data Processing Department Manager  
Electronic Data Processing Manager  
Operations Manager  
Product Development Manager  
Project Leader/ Manager  
Systems Manager  
Technology Human Resources  
Manager

### Networking

Network Administrator  
Network Service Analyst  
Network Service Engineer  
Network System Consultant  
Network Systems Engineer  
Technical Advisor

# COMPUTER SCIENCE AND INFORMATION SYSTEMS MAJORS

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[www.uwrf.edu/career](http://www.uwrf.edu/career)



## CAREER OPPORTUNITIES (continued)

### Education

College Professor  
Education Consultant  
High School Teacher  
Data Management:  
Data System Consultant  
Database Administrator/  
Senior Database Administrator  
Database Engineer  
Database Systems Engineer  
Production Management:  
Production Management Analyst  
Production Scheduler  
Production Service Technician  
Project Management Coordinator  
Senior Production Service Technician

*\*Amount of education may vary depending on the level of the position*

### Additional Opportunities

Animator  
Buyer Technical Acquisitions Specialist  
Chief Information Officer  
Computer Aided Designer  
Computer Applications Engineer  
Computer Programmer  
Computer Service Technician  
Computer Support Specialist  
Computer Systems Engineer  
Database Analyst  
Data Reduction Analyst  
Desktop Solutions Consultant  
Electronic Data Processing Auditor  
Electronics Engineer  
Electronic Publishing Coordinator  
Hardware Service Technician  
Hardware/Software Marketer or Salesperson  
Information Systems Specialist

ITS Engineer  
Media Conversion Specialist  
Media Support Technician  
Procedures Analyst  
Risk Analyst  
Robotic Technician  
Server Administrator  
Software Engineer/Software Test Engineer  
Software Package Designer  
Software Processing Engineer  
Statistician  
Technical Computer Administrator  
Technical Editor/Writer  
Technical Engineer  
Technical Illustrator  
Training Coordinator  
Web Designer  
Web Programmer

## CAREER RESOURCES

- **UWRF Computer Science and Information Systems Department Website:** [www.uwrf.edu/computer-systems](http://www.uwrf.edu/computer-systems)
- **Career Services Website:** [www.uwrf.edu/career](http://www.uwrf.edu/career)
- **Hire-a-Falcon/UWRF Mentor Network (Online Job Searching Website):** [www.uwrf.edu/jobs](http://www.uwrf.edu/jobs)
- **Job Searching:** [www.uwrf.edu/career/jobsearch\\_sites.htm](http://www.uwrf.edu/career/jobsearch_sites.htm)
- **Internships:** [www.uwrf.edu/internships](http://www.uwrf.edu/internships)
- **Career Services-University of North Carolina Wilmington:** [www.uncwil.edu/stuaff/career/Majors/computer.htm](http://www.uncwil.edu/stuaff/career/Majors/computer.htm)
- **Computer Jobs and Technical Employment:** <http://computerwork.com>
- **Computer World Careers:** [www.computerworld.com/cwi/careers](http://www.computerworld.com/cwi/careers)
- **Developers.net:** [www.developers.net](http://www.developers.net)
- **IEEE Computer Society:** <http://computer.org>
- **Tech-Centric.net:** [www.tech-centric.net](http://www.tech-centric.net)
- **Jobs for Programmers:** [www.prgjobs.com](http://www.prgjobs.com)
- **International Webmasters Association:** [www.iwanet.org](http://www.iwanet.org)
- **Internet Society:** [www.isoc.org](http://www.isoc.org)
- **Institute for the Certification of Computer Professionals:** [www.iccp.org](http://www.iccp.org)



**CAREER SERVICES**  
- Navigating Your Success

