



# XAVIER UNIVERSITY CAREER SERVICES CENTER

Conaton Learning Commons, Room 530 | 513-745-3141 | [xavier.edu/career](http://xavier.edu/career)

## CAREER OPPORTUNITIES FOR COMPUTER SCIENCE MAJORS

### SKILLS & ABILITIES OF THE COMPUTER SCIENCE MAJOR

#### Analytical Skills

- Identifying problems
- Thinking logically
- Conceptualizing complex systems
- Solving problems
- Assessing needs
- Reasoning Algorithmically
- Testing solutions

#### Technical Skills

- Evaluating computer software and systems
- Conducting feasibility studies
- Managing databases
- Designing program

#### Organizational Skills

- Attending to detail
- Coordinating tasks
- Working in teams
- Setting priorities
- Planning complex tasks
- Finger Dexterity– able to precisely coordinate finger movements to complete tasks

#### Communication

- Writing documentation
- Explaining processes
- Writing/understanding computer language
- Describing technical information to non-technical personnel

*\*Partially taken from the University of Kansas Career Center*

### POTENTIAL CAREERS

#### Business

- Technical Support Representative
- Computer Graphics Technician
- Senior Applications Planner \*
- Research & Development Lab Programmer \*
- Strategic Analyst
- Marketing Consultant
- MIS Corporate Officer
- Product Manager
- Computer Systems Analyst
- Corporate Security Specialist
- Electrical Engineer \*

#### Education and Communication

- Professor \*
- Editor, Technical Journal
- Graphic Artist, Computer Aided Design
- Training Specialist
- Computer Support
- Technical Writer
- Computer Skills Teacher / Curriculum Developer
- Integrated Library Software Designer \*
- Artificial Intelligence Developer
- Top Executives (CEO)
- Engineering & Natural Science Management

\* Careers generally requiring graduate / professional degrees

*\*Partially taken from O\*NET OnLine & the Occupational Outlook Handbook*

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## POTENTIAL CAREERS (CONT.)

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### Government (Public)

- Communications control technician
- Public Health Service computer specialist
- Defense Dept. equipment specialist
- Systems programmer
- Technical information specialist \*
- Auditor \*
- Foundation information analyst
- Air traffic controller \*
- Health information database designer

### Research and Development

- Biomedical engineer \*
- Expert systems designer \*
- Genetic engineer \*
- Automated systems designer
- Intellectual properties lawyer \*
- Applications programmer
- Demographer
- Statistician \*

\* Careers generally requiring additional graduate study

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## TYPES OF EMPLOYERS

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- Businesses
  - College / Universities
  - Self-Employment
  - Nonprofit Organizations
  - Secondary Schools
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## COMPUTER SCIENCE RELATED TASKS

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Analyze problems to develop solutions involving computer hardware and software.

- Apply theoretical expertise and innovation to create or apply new technology, such as adapting principles for applying computers to new uses.
- Approve, prepare, monitor, and adjust operational budgets.
- Assign or schedule tasks in order to meet work priorities and goals.
- Conduct logical analyses of business, scientific, engineering, and other technical problems, formulating mathematical models of problems for solution by computers
- Consult with users, management, vendors, and technicians to determine computing needs and system requirements.
- Design computers and the software that runs them.
- Develop and interpret organizational goals, policies, and procedures.
- Develop performance standards, and evaluate work in light of established standards.
- Direct daily operations of departments, coordinating project activities with other departments.
- Evaluate project plans and proposals to assess feasibility issues.
- Maintain network hardware and software, direct network security measures, and monitor networks to ensure availability to system users.
- Meet with managers, vendors, and others to solicit cooperation and resolve problems.
- Participate in multidisciplinary projects in areas such as human-computer interaction, or robotics.
- Participate in staffing decisions and direct training of subordinates.

*\*Partially taken from O\*NET OnLine*

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## RELATED BOOKS IN THE CAREER RESOURCE LIBRARY (CLC 530)

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- *Opportunities in Computer Careers*
- *Careers in High Tech*
- *Resumes for Computer Careers*
- *Resumes for Scientific and Technical Careers*
- *Careers in Focus: Computer and Video Game Design*
- *Information Technology Jobs in America*