A bachelor's degree in computer science will provide the opportunity to work in many areas including industry, business, and government. Computer science is heavily math-based, so students should consider adding math, another major/minor, or specific certifications to their education and training to gain specialty skills and knowledge. Technology advances quickly and individuals in this field should be prepared to learn new information on a regular basis throughout their careers, follow trends, and stay abreast of developments. It is critical to gain practical experience in the field while in college through internships, part-time or summer jobs, or volunteer experience. This will allow you to apply academic knowledge and skill to a professional setting, plus you will build your professional network.

Proficiency of technical skills and programs relevant to your specific interest areas is critical in this field. In addition to technical skills, it’s important to develop interpersonal, communication, and teamwork skills. Other helpful traits include creativity, problem-solving, logical analysis, intellectual curiosity, and perseverance.

A major in computer science may lead to being a designer, creator, and inventor of new technology. Examples of such areas include computer hardware architecture, software design, virtual reality, and robotics. In some areas of computer science, professionals should expect to work extended and/or irregular hours and expect to be on-call.

To learn more about the field, connect with professionals, engage in additional training opportunities, work on self-directed projects, embrace new technologies, and join professional associations and organizations related to computer science.

The field of computer science is dynamic and features great opportunity.

**Areas of Opportunity**

- Programming
- Systems Development
- Network Technology
- Database Administration
- Internet/Web-Based Operations
- Software Design
- Technical Support
- Artificial Intelligence
- Instructional Technology
- Gaming
- Robotics
- Education
- Technical Writing
- Customer Support
- Sales & Marketing
- Installation
- Cyber Security
- Big Data
- Hardware

**Common Employers**

- Software Development Firms
- Data Processing and Management Companies
- Local, State, and Federal Government
- Colleges and Universities
- Public and Private Schools K-12
- Private Industry Corporations
- Sales and Marketing Firms and Departments
- Finance and Insurance Firms
- Technology or Internet Service Providers
- Telecommunications Companies
- Transportation Agencies
- Healthcare Organizations
- Hospitality Industry
- Manufacturing Firms
- Retail Companies

**Professional Organizations**

- ACM - Association for Computing Machinery
- AITC - Association for Women in Computing
- IEEE CS - IEEE Computer Society
- IACST - International Association for Computer Science and Information Technology
- CRA - Computing Research Association
- AAAI - Association for the Advancement of Artificial Intelligence
- AITP - Association for Information Technology Professionals
- SIIA - Software and Information Industry Association
- ICS - International Career Development Society
- SIA - Software and Information Industry Association

** Strategies on Entering the Field**

- Obtain relevant technical experience through internships, part-time work, and projects.
- Learn new and emerging programs/technologies and understand their application to your career area of interest.
- Develop effective analytical, problem solving, and strong interpersonal skills for effective communication with technical and non-technical colleagues and clients.
- Learn to work well on a team and develop leadership skills.
- Complete a minor to gain specialized knowledge related to your field of interest.
- Attend special conferences and seminars related to your target discipline.
- Explore resources such as LinkedIn to connect with computer science professionals and learn about companies, industries, skills needed to succeed in the field.
- Join student and professional organizations learn valuable skills and build relationships.
- Create a resume that highlights your skills and experience related to engineering, your specific field of interest, and your unique qualifications.
- Engage in projects to apply skills and knowledge to a practical setting.

Created by: Center for Career and Experiential Education 2018
All information provided by: What Can I Do With This Major?