Computer science is a mixture of the practical areas of computer programming and the theoretical components of computers and computing. Mathematics, science, and engineering courses help to prepare students for the various career areas available which include applying theory, designing programming tools, creating computer games, advancing the use of virtual reality, increasing human-computer interaction, and maintaining robotics. UW–Eau Claire offers comprehensive majors in computer science and geographic information systems and software engineering. A minor is also offered in web design and development.

**Typical interests and values of computer science majors:**
- Likes to work independently
- Problem-solving skills
- Detail-oriented
- Creativity

**Knowledge and skills gained from studying computer science:**

**Knowledge:**
A student of computer science will learn the design, application, and effectiveness of computers, computer programs, and computer systems. They will also gain knowledge of management, analysis, and dissemination of information. Their theoretical knowledge and creativity can be used to solve difficult problems by applying or creating new technology.

**Skills:**
- Advanced quantitative abilities
- Understanding of computer language and systems
- Ability to cope with constant change
- Abstract reasoning
- Ability to multi-task
- Identifying and solving problems
- Extracting relevant information
- Handling and organizing details
- Creating and implementing ideas

**Related student and professional organizations:**

**Student:**
- Society for Technical Communication

**Professional:**
- Association of Information Technology Professionals
- Association of Information Technology Professionals
- Association for Computing Machinery
- Computing Research Association
- University Consortium for Geographic Information Science

**Career fields related to computer science:**

**Potential Employers:**
The effect of globalization on the computer industry makes predicting future demand for computer scientists difficult. However, it is certain that companies in a variety of fields will continue to need computer scientists for software development and engineering, sales and service, systems development and programming, and for computer operations.

**Potential Job Titles:**
- Information Technology Commission (ITC) of Student Senate
- Association of Information Technology Professionals

Biometrician/Biostatistician
Cryptographer/Cryptologist
Risk Analyst
Environmental Technologist
Urban Planner
Game Designer
Information Consultant
Computer Auditor
Network Administrator
Technical Writer
Associate Programmer
Sample entry level jobs held by UW-Eau Claire computer science graduates:
- IT Analyst, Marshfield Clinic, Marshfield, WI
- Lead Designer/Web Developer, Champ Software, Mankato, MN
- Programmer/Analyst, Northwestern Mutual, Milwaukee, WI
- Database Administrator, IT Convergence, De Pere, WI
- Software Engineer, Liberty Mutual Insurance Company, Merrill, WI

Learn more about computer science:
Department
- Contact UW–Eau Claire’s Department of Computer Science, Phillips 130, 836-2526

Getting started at Career Services:
- Meet with a career counselor
- Take interest inventory and self-assessment tests
- Utilize Blugold Career Success Network, a database of UW–Eau Claire alumni & friends available for informational interviewing
- Utilize Blugold CareerLink, an online job search database specifically for UWEC students and alum

Resources at Career Services:
Yellow Section-
- Sigi 3 handouts:
  - Computer Engineer
  - Computer Network Specialist

Opportunities to enhance skills in computer science:

Internships
Internships are a way to gain hands-on experience in a position that interests you as a potential career. To find an internship in computer science, visit Career Services (Schofield 230) and speak with a career associate. Contact your adviser or the Department of Computer Science chair about enrolling in CS 498 to obtain academic credit for your internship.

Research
There are many opportunities for students to participate in research to enhance the breadth of knowledge learned in the classroom. To learn about Research Experience for Undergraduates (REUs) visit the REU’s website, www.nsf.gov/crssprgm/reu. For additional information about research at UW-Eau Claire, contact the Department of Computer Science.

Directed Studies or Independent Study Class
By participating in a directed studies or independent study class, students will be able to research an area that they find particularly interesting. Contact your adviser about enrolling in CS 399.

What you can do now:
- Become a web developer for a campus organization.
- Job shadow a professional in your area of interest or conduct informational interviews.
- Take some time to create programs of your own, enhancing your creativity and functional skills.
- Volunteer to assist a non-profit organization with their computer needs.