Computer Science

Do you love computers? Have you ever wanted to develop and/or modify computer systems software and hardware? Would you love to work with computer operating systems and utilities? According to the U.S. Department of Labor, seven of the ten fastest growing occupations over the next ten years will be in the information technology field. On the UW-Eau Claire campus, the number of incoming computer science majors has nearly doubled over the past two years.

**Majors**
- **Computer Science** - Software Engineering
- Comprehensive major (no minor required)
- **Computer Science**

**Minor**
- **Computer Science**

**Certificate**
- **Computer Programmer**

**Where you'll find our grads**
- National: Google, Amazon, Facebook, Microsoft, Intel Labs, NSA, Lockheed Martin
- Regional: JAMF, 3M, Cray, SGI, Cargill, Target, Northwestern Mutual, Liberty Mutual
- Grad school: UW-Madison and University of Minnesota

**Prepared for Success**
UW-Eau Claire’s CS program is applied and leads to high placement rates. With a good GPA and the experiences provided through the program, placement rates are near 100 percent.

**Why UW-Eau Claire**

**Scholarships**
A $5 million gift was given to the Computer Science department by David and Marilyn Karlgaard to continually support financial incentives for outstanding faculty, scholarships for students and technology updates. The Karlgaard scholarship is a $20,000 award for computer science, software engineering, or computer engineering majors. The scholarship is awarded over four years, and recipients must maintain a 3.3 GPA or higher and be involved in research their junior and senior years of college. The Computer Science department is one of the few academic departments that awards scholarships to incoming freshmen.

**Faculty Experts**
The computer science faculty have expertise in databases, operating systems, software engineering and web development. Faculty have expertise in areas such as computer graphics, vision, robotics, computer architecture, computer security,
distributed systems, networking, theory of computation, artificial intelligence and computational science. Excellent teachers design coursework and assignments that challenge and engage students. The department has received two grants from the National Science Foundation in the last six years in recognition of its innovative curriculum and has been nominated three times for the UW System Outstanding Teaching Department.

Internships
The internships available to computer science students are paid or apply for credit, and some are both. The Computer Science department and the Career Services office work very hard to make sure all students are placed into the right internship for their interests and skills. UW-Eau Claire’s computer science students are in high demand by prestigious companies: The department has a 100% placement rate for internships with a $20.00 hourly wage, and each senior on average receives 2.5 job offers with a starting salary of $60,000.

Research Opportunities
Within the Computer Science department, professors are devoted and eager to collaborate with students on different projects. Student researchers have the opportunity to present their work at conferences and the annual Celebration of Excellence in Research and Creative Activity (CERCA) on campus. Below are a few topics of ongoing research:
- Natural Language Processing
- Data Mining
- Computer Security
- Data Query Analyzer (DBQA)

Innovative Facilities
The Computer Science department maintains four state-of-the-art computer labs uniquely designed and unlike any others in the region. The Karlgaard Laptop Lab provides a quiet, comfortable study and workspace, reserved for computer science students only. The Teaching Lab has 28 stations and laptop stations with equipment updated every two years to ensure students work with the most recent technology. The Software Design Lab offers computing technologies for developing and implementing group software design projects. The Cray Computer Engineering Lab contains equipment used to investigate computer hardware issues and build systems, integrating hardware and software.

First-Year Suggested Curriculum
- Big Picture in Computer Science+
- Fundamentals of Object Oriented Programming*
- Calculus I
- Freshman Experience course
- General electives

Course Work / Pre-Professional Courses
The Computer Science department keeps up with current technology trends by constantly evaluating and updating the curriculum, such as adding application development courses. Two distinct majors are currently offered.
- Computer Science — Comprehensive major: a comprehensive major with coursework in software engineering and database systems, computer hardware and operating systems,
- Computer Science — Software Engineering: a standard major with a focus on software design and development intended for students who wish to become professional software engineers.

Special Admission Guidelines
All undergraduate computer science majors should have a good mathematics background. Students are required to show a college algebra competency before taking freshman coursework.

* Required for all majors
+ Required for comprehensive major