

COMPUTER SCIENCE

Phillips 130

715-836-2526

Department Website (<https://www.uwec.edu/academics/college-arts-sciences/departments-programs/computer-science/>)

About Us

Computer Science and Software Engineering are disciplines that combine concepts from mathematics, science, and engineering into a coherent and disciplined study of the software and hardware required for computation. The programs offered by the UW-Eau Claire Department of Computer Science provide the fundamental education necessary to prepare students for positions in industry or to pursue graduate study. The curriculum is organized so that graduates will be able to meet immediate demands for solving computational problems or designing state-of-the-art computer systems, yet also have an understanding of the basic principles and concepts in computer science needed to avoid technological obsolescence in a rapidly changing environment. This program is intended to produce computer science professionals, not merely technicians with some training in computer software and hardware. Success requires a strong aptitude in mathematics.

The Program for Majors and Minors

Department faculty constantly examine the curriculum to ensure that students gain both the breadth and depth of knowledge needed to be successful in careers in business and industry, or in graduate school. The major/minor curriculum includes:

1. Introductory courses which cover the basic principles of Computer Science.
2. The use of object-oriented and other programming paradigms.
3. An integrated blend of courses which cover the tools, knowledge, problem-solving, and programming techniques that form the basis for a successful career.
4. A capstone experience.

Departmental Honors in Computer Science

Eligibility: Students with resident and total GPAs of 3.50 or higher and a 3.50 or higher in at least 12 credits of computer science.

Procedure: A written application for Departmental Honors in Computer Science shall be approved by the research advisor and the departmental honors committee. The application and approval process must be completed no later than the end of the junior year.

Requirements:

1. The satisfactory completion of
 - a. six credits of registration in Computer Science Research, including the writing of a research paper;
 - b. an oral presentation to be given to at least three members of the faculty.
2. Resident and total GPAs of 3.50 or higher in both the computer science major and for all credits attempted to meet graduation requirements.
3. Participation in at least one Student ACM Programming Contest.

Information for All Students

It is strongly recommended that the student have a grade of C or above in any Computer Science course, which is to be used as a prerequisite to another

course. Where a grade of C- or below is earned in a Computer Science course, the student should repeat the course before continuing.

Faculty

Naeem Seliya, Chair

Benjamin Fine

Rahul Gomes

Emily Hastings

Xiang Ma

Samuel Schwartz

Mounika Vanamala

Bokai Yang

Majors

- Major: Computer Science, Software Engineering, Liberal Arts - B.A./B.S. (<http://catalog.uwec.edu/undergraduate/arts-sciences/computer-science/computer-science-major-software-engineering-ba-bs/>)
- Comprehensive Major: Computer Science, Liberal Arts - B.A./B.S. (<http://catalog.uwec.edu/undergraduate/arts-sciences/computer-science/computer-science-comprehensive-major-ba-bs/>)
- Comprehensive Major: Artificial Intelligence, Liberal Arts - B.A./B.S. (<http://catalog.uwec.edu/undergraduate/arts-sciences/interdisciplinary/artificial-intelligence-comprehensive-major-ba-bs/>) (College of Arts and Sciences Interdisciplinary Major) (<http://catalog.uwec.edu/undergraduate/arts-sciences/interdisciplinary/biochemistry-molecular-biology-comprehensive-major-ba-bs/>)
- Major: Artificial Intelligence, Liberal Arts - B.A./B.S. (<http://catalog.uwec.edu/undergraduate/arts-sciences/interdisciplinary/artificial-intelligence-major-ba-bs/>) (College of Arts and Sciences Interdisciplinary Major) (<http://catalog.uwec.edu/undergraduate/arts-sciences/interdisciplinary/biochemistry-molecular-biology-comprehensive-major-ba-bs/>)

Minors

- Minor: Computer Science, Liberal Arts, Liberal Arts Emphasis (<http://catalog.uwec.edu/undergraduate/arts-sciences/computer-science/computer-science-minor-liberal-arts/>)
- Minor: Artificial Intelligence, Liberal Arts (<http://catalog.uwec.edu/undergraduate/arts-sciences/interdisciplinary/artificial-intelligence-minor/>) (College of Arts and Sciences Interdisciplinary Minor) (<http://catalog.uwec.edu/undergraduate/arts-sciences/interdisciplinary/biochemistry-molecular-biology-comprehensive-major-ba-bs/>)

Certificates

- Certificate: Computer Programmer (<http://catalog.uwec.edu/undergraduate/arts-sciences/computer-science/computer-programmer-certificate/>)
- Certificate: Artificial Intelligence (<http://catalog.uwec.edu/undergraduate/arts-sciences/interdisciplinary/artificial-intelligence-certificate/>) (College of Arts and Sciences Interdisciplinary Certificate) (<http://catalog.uwec.edu/undergraduate/arts-sciences/interdisciplinary/biochemistry-molecular-biology-comprehensive-major-ba-bs/>)