



# UNIVERSITY OF WISCONSIN WHITEWATER

## ACADEMIC ASSESSMENT

### COMPUTER SCIENCE

#### MISSION STATEMENT

The Department of Computer Science wishes to promote the understanding of technology in gathering, process, and analyzing data. It aims to accomplish this by encouraging continuing research on the part of faculty and creating an atmosphere in which students and faculty can learn and study together. Recognizing the rapidly changing nature of the applications of computers, the department also wishes in classes to present the ideas that underlie changing hardware and software. In achieving this goal, the department seeks to work with industry and government to bring student and faculty efforts to bear on problems facing the people of Wisconsin and beyond.

#### STUDENT LEARNING OUTCOMES

*Student learning outcomes (SLOs) are statements of what a student will know or be able to do when they have completed a program. They represent the knowledge and skills a program has determined are most important for students to gain from that program. The most useful SLOs are specific and measurable so the program can accurately assess the degree to which students have achieved each outcome, and they align with college and institution mission and values. Data on achievement of SLOs is used to make improvements in the program and increase student success.*

Upon graduation, students who graduate with a Computer Science major at UW-Whitewater will be able to:

##### Proficiency in Mathematics:

- Apply mathematical and scientific reasoning to a variety of computational problems.
- Understand the theory and algorithms underlying various topics in computer science.

##### Technical Skills:

- Analyze a problem and formalize the computational needs for its solution.
- Implement their formalization in one or more programming languages.
- Evaluate, verify, trouble-shoot, test and analyze an existing computer-based system, process, component or program.

##### Teamwork and Project Management:

- Work effectively in teams to design and implement software systems and effectively manage conflicts, optimize resources and meet deadlines.

**Oral and Written Communications:**

- Communicate ideas verbally in an organized manner and write clear and concise documentation and project reports.

**Ethical Issues:**

- Have an awareness of key ethical issues affecting computer science and their responsibilities as computer science professionals.
- Understand the impact of computers in society.