University of Wisconsin Whitewater | School *of* Graduate Studies

MASTER OF SCIENCE IN

COMPUTER SCIENCE

"The best part about computer science at UW-W is the faculty. The professors are with you every step of the way. From advising, through classes and personal development. They are engaged and genuinely care about our success." ***Current Computer Science Student***

You want a career that challenges you to keep learning and growing. You want to be rewarded for that hard work with high average earnings and a positive career outlook. And you want to be able to choose from a career path that truly stimulates your interests. That is exactly why Computer Science is the #1 Major Nationwide with the highest median base salary.

It isn't just about the money. Earning an MSCS will provide you with an opportunity tackle more complex projects and develop skill mastery. After all, Computer Science isn't just one field. The MSCS program at the University of Wisconsin-Whitewater, gives you personalized curriculum and course projects to excel in your areas of interest, or those most needed at your organization: software engineering, algorithm, machine learning, data science, cybersecurity, and any other computing related interdisciplinary areas.

The MSCS program is a project-orientated experience. You will work first-hand on research projects, real-world applications, and on solutions that you can apply to your work-life today. Each course is structured to be a semester-long group project that allows you to learn, absorb, and use the knowledge to solve practical problems relating to course content. What's more, our faculty is engaging and committed to your success. From your first advising session to graduation and beyond, you will have an advocate for your success in our award-winning instructors.

uww.edu/cls/departments/computer-science/graduate-program

For More Information: uww.edu/gradstudies • (262) 472-1006 • grad@uww.edu

School of Graduate Studies, UW-Whitewater RS 2013, 800 W. Main Street Whitewater, WI 53190

University of Wisconsin Whitewater | School *of* Graduate Studies

The MSCS program at the University of Wisconsin-Whitewater is a 30-credit program. Students with non-Computer Science background will need to take additional deficiency courses as specified in the admission requirements. Features of the MS in CS Program:

30 credits (15-24 months) to completion

Offers two emphases: general emphasis and cybersecurity engineering emphasis
Fall, Spring and Summer admissions
Project-based curriculum in leading edge computer science fields
Paid graduate assistantships available
Most courses available online or in hyflex format

Flexibility
Most courses available in online or hyflex format

Complete Course Requirements

Core Courses: Total of 9 units, 3 courses

COMPSCI 733 - Advanced Algorithm Design and Analysis
Select two courses out of the following
COMPSCI 724 - Operating Systems in Practice
COMPSCI 732 - Machine Learning
COMPSCI 766 - Advanced Database
COMPSCI 776 - Advanced Software Engineering

Emphasis courses: Total of 15-18 units. Select one emphasis

1. General Emphasis. Select 15-18 units of COMPSCI courses numbered 700 or above that include

COMPSCI 735 - Optimization: Techniques and Applications
COMPSCI 736 - Image Processing and Computer Vision
COMPSCI 738 - Algorithms in the Real World
COMPSCI 750 - System and Software Security
COMPSCI 755 - Cryptography and Security Protocols
COMPSCI 764 - Cloud Computing
COMPSCI 767 - Big Data and Data Mining
COMPSCI 777 - Software Testing
COMPSCI 778 - Software Specification and Verification
COMPSCI 796 - Special Topics (Repeatable)

2. Cybersecurity Engineering Emphasis

COMPSCI 750 - System and Software Security
COMPSCI 755 - Cryptography and Security Protocols
CYBER 754 - Intrusion Prevention and Detection
Select 6 units from the following
CYBER 730 - Fundamentals of Ethical Hacking
CYBER 740 - Cybersecurity and Privacy Law
CYBER 742 - Computer Forensics
CYBER 747 - Embedded System Security
CYBER 752 - Malware Reverse Engineering
CYBER 758- Cloud Security
CYBER 759 - Topics in Cyberseurity
Select 0-3 units of COMPSCI courses numbered 700 or above

Capstone: Select 3-6 total units from:

COMPSCI 789 - Capstone Project
COMPSCI 799 - Thesis Research

Note that students pursuing the M.S. degree in Computer Science may declare either the applied research project option or the thesis option to fulfill their capstone requirement for graduation. Students who choose the thesis option must earn at least 3 units of COMPSCI 799 credit. Students who choose the applied research project option must earn at least 3 units of COMPSCI 789 credit.

Total Units: 30