



# MASTER OF SCIENCE IN **CYBERSECURITY**

“Our faculty have a reputation as being some of the best instructors in the region. Being designated as a Center of Academic Excellence in Cyber Defense validates what our students, employers, and industry partners have known all along - the practical, take-away skills delivered in our curriculum are among the most relevant and rigorous in the country.” *Andrew P. Ciganek, Ph.D*

## **Specialized degree to protect our digital world.**

Drawing on faculty from both the information technology and the computer science programs at UW-Whitewater, the Master of Science in Cybersecurity is an interdisciplinary degree that will allow students to develop deep expertise in current cybersecurity issues. All courses in the program are focused on cybersecurity, and the curriculum has been designed to align with the National Centers of Academic Excellence (CAE) program, which is jointly sponsored by the Department of Homeland Security and the National Security Agency. The goal of the CAE program is to reduce vulnerability in our national information infrastructure by promoting higher education and expertise in cyber defense.

Beyond theoretical knowledge, UW-Whitewater's Online Cybersecurity Program will provide extensive hands-on learning. Collaboration with the Cybersecurity Center for Business at UW-Whitewater will offer opportunities for students to work with businesses and learn from real-world case studies.

## **Leadership in cybersecurity education**

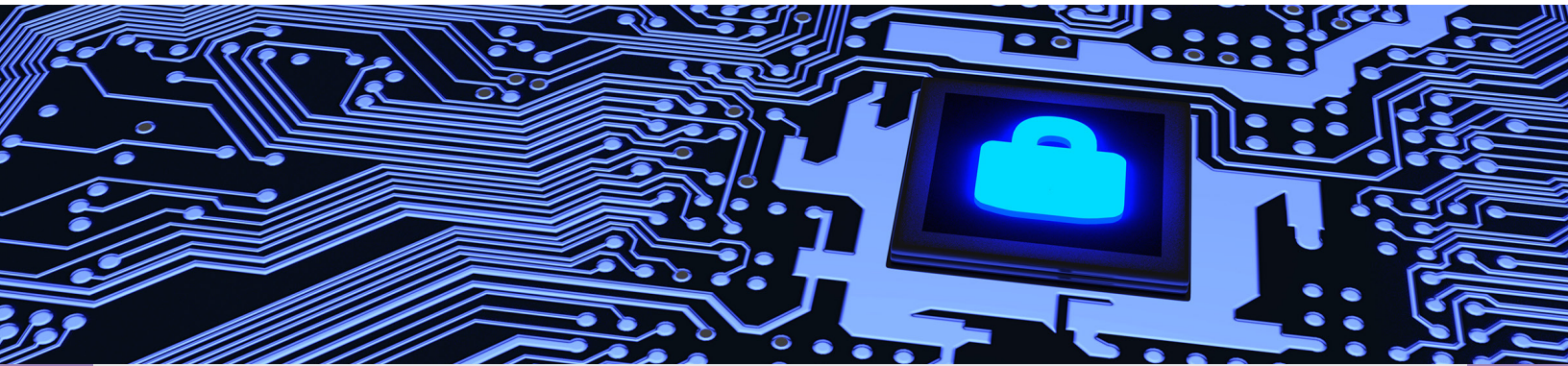
UW-Whitewater's highly qualified faculty are fully committed to cybersecurity and have industry contacts throughout the Midwest. This commitment, together with the close association with the Cybersecurity Center for Business, the strength of the university's other computer science and information technology programs, and the specialized Master of Science in Cybersecurity, positions UW-Whitewater to lead cybersecurity education activities in Wisconsin.



[www.edu/online/masters/cybersecurity](http://www.edu/online/masters/cybersecurity)

For More Information: [www.edu/gradstudies](http://www.edu/gradstudies) • (262) 472-1006 • [grad@uw.edu](mailto:grad@uw.edu)

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## Curriculum

### Core Courses (15 credits)

The five courses below will provide the critical operational knowledge required in cybersecurity careers.

- Fundamentals of Ethical Hacking (3 credits)
- Management of Information Assurance and Security (3 credits)
- Cybersecurity and Privacy Law (3 credits)
- Computer Forensics (3 credits)
- Intrusion Prevention and Detection (3 credits)

To earn the Master of Science in Cybersecurity, you must also complete either the **Cyber Resilience Emphasis** or the **Security Engineering Emphasis**. More information on each emphasis structure and courses can be viewed in the Graduate Catalog.

### Program Prerequisites (dependent on emphasis and work experience)

Students who do not meet basic admissions requirements may take prerequisite courses before starting the graduate coursework.

- System Fundamentals of Cybersecurity (3 credits)
- Introductory Programming (3 credits)
- Intermediate Programming (3 credits; applies to Security Engineering emphasis only)

## CYBERSECURITY CERTIFICATES

### Cybersecurity Management

Students must complete four courses (12 credits) from the classes below:

- CYBER 730: Fundamentals of Ethical Hacking (3 credits)
- CYBER 731: Management of Information Assurance and Security (3 credits)
- CYBER 732: Cybersecurity and Privacy Law (3 credits)
- CYBER 733: Computer Forensics (3 credits)
- CYBER 734: Intrusion Prevention and Detection (3 credits)

Students must also complete one course (2 - 3 credits) from the class list below:

- ITSCM 770: Fundamentals of Project Management (2 credits)
- MANGEMNT 757: Leadership Development (3 credits)
- MANGEMNT 759: Social Responsibility of Business (2 credits)

**Total Units 14-15**

### Cybersecurity

- COMPSCI 750: System And Software Security (3 credits)
- CYBER 754: Intrusion Prevention And Detection (3 credits)
- COMPSCI 755: Cryptography And Security Protocols (3 credits)

Select one course out of the following list:

- CYBER 759: Topics In Cybersecurity (3 credits)
- ITSCM 760: Topics In Information Technology And Management (Topic needs to be in cybersecurity) (3 credits)

**Total Units 12**