

MASTER OF SCIENCE IN CYBERSECURITY

100% ONLINE

Your Path to a Secure Future



DEGREE OVERVIEW

Cybercrime continues to threaten large organizations, small businesses, and the everyday consumer. In fact, according to the 2024 Official Annual Cybercrime Report, a ransomware attack occurs every 19 seconds. And this growing number of threats directly impacts the demand for cybersecurity talent. One problem: organizations can't fill information security positions fast enough.

The online University of Wisconsin Master of Science in Cybersecurity was developed to fill the growing talent gap by providing the cybersecurity skills demanded by today's employers. The program offers four tracks of study aimed to drill down into specialized areas in the field. As a student, you'll complete a core curriculum and then choose one of the four tracks.

DEGREE TRACKS



DIGITAL FORENSICS

Digital forensics uses scientific investigation methods to collect, preserve, and analyze data stored on electronic media so that it can withstand legal review. As a student in this track you will study computer criminology, network forensics, and learn digital evidence investigation techniques.



CYBER RESPONSE

Cyber response is an organized approach to monitoring, detecting and responding to security events through each stage of their lifecycle. It encompasses both defensive and offensive security strategies—including threat identification, management and prevention. As a student in this track, you will learn about security infrastructure, incident remediation, and active defense techniques.



GOVERNANCE & LEADERSHIP

Cybersecurity governance provides a framework for mitigating risk by assuring that information security strategies align with business objectives, and are consistent with relevant laws and regulations. It includes executive leadership and communication at every level of the organization. As a student in this track, you will take courses in security administration, leadership, and cybersecurity management.



SECURITY ARCHITECTURE

Security architecture is responsible for system confidentiality, integrity, and availability in relation to an enterprise's overall system architecture and security process. As a student in this track you will study modern cryptography, the foundations of engineering secure applications, cyber-physical systems, and secure cloud computing.

A UNIVERSITY OF WISCONSIN DEGREE



EARN A RECOGNIZED AND RESPECTED DEGREE

Where you earn your degree matters. The Universities of Wisconsin are among the most recognized and respected in the country. As an online student, you will earn the same UW degree as on-campus students.



ENJOY A FLEXIBLE AND SUPPORTIVE EDUCATION

UW Cybersecurity students are supported by a student success coach, your point person for the program. Faculty are also just an email away. Students often say the online format is a natural fit and a big factor in their ability to earn a degree while balancing work and family responsibilities.



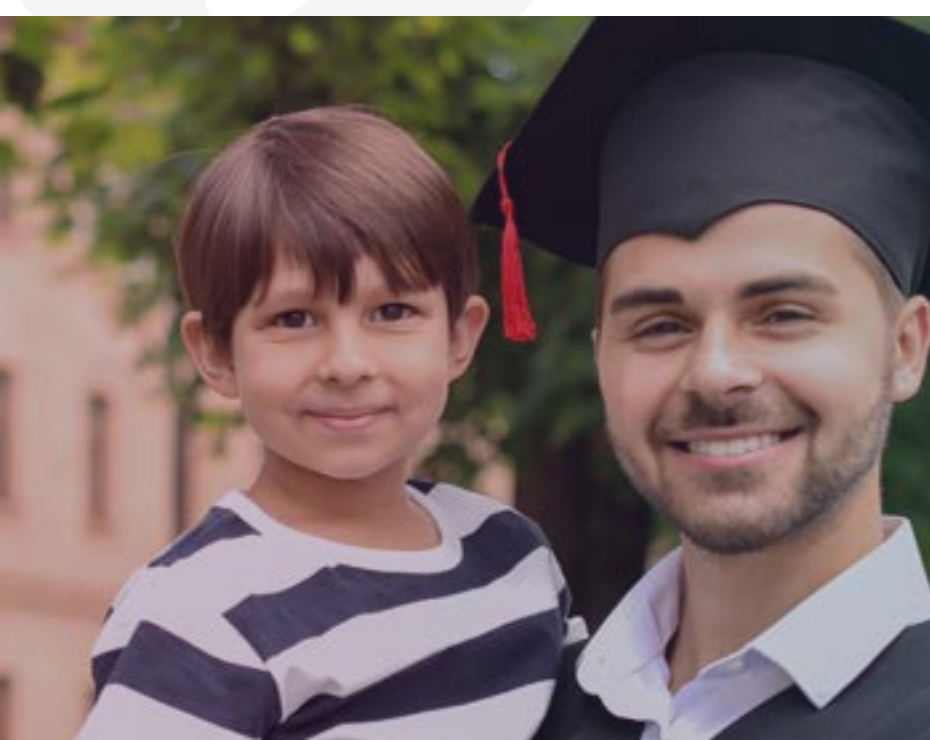
BENEFIT FROM UW CAMPUS COLLABORATION

The 100% online UW Master of Science in Cybersecurity degree is a collaboration between eight UW campuses, giving you access to top talent and the collective resources of the UW System. You will take courses taught by esteemed faculty from all eight UW campuses, each contributing diverse expertise from fields including computer science, engineering, communications, economics, and mathematics.



GAIN IN-DEMAND CYBERSECURITY SKILLS

As a student in this graduate program, you will become knowledgeable in high-need areas such as cryptography, risk assessment, risk management, and network security, among others. You will also develop essential soft skills through coursework in technical communication, cybersecurity planning, and by studying sociology as it applies to the human role in cybersecurity.



The Cybersecurity Talent Gap

There's undoubtedly a growing need for cybersecurity professionals. [Cyberseek](#), a tool dedicated to informing employers, educators, and students of high-need cybersecurity talent. From May 2023 through April 2024, there were only 85 cybersecurity workers available for every 100 cybersecurity jobs demanded by employers.

There's no slowing down either in the search for cybersecurity professionals. The Bureau of Labor Statistics predicts a 13 percent increase in cybersecurity-related jobs between 2018-2028. Jobs including cybersecurity architect, security engineer, network security analyst, and cybersecurity specialist will continue to be in high demand.

CURRICULUM

The UW Master of Science in Cybersecurity curriculum is comprised of 12 courses, for a total of 34 credits. As a student in the program, you will take seven core courses and three concentration courses in your track of study. You will also complete a one-credit capstone preparation course and a final project-based capstone course. Only one track is required to graduate, but you may choose to pursue more than one. Course descriptions can be found at uwex.wisconsin.edu/cybersecurity

Core Courses

Course Number		Credits
CYB 700	Fundamentals of Cybersecurity	3
CYB 703	Network Security	3
CYB 705	Sociological Aspects of Cybersecurity	3
CYB 707	Cybersecurity Program Planning and Implementation	3
CYB 710	Introduction to Cryptography	3
CYB 715	Managing Security Risk	3
CYB 720	Communication in Cybersecurity	3

Track Courses



Digital Forensics

CYB 725	Computer Forensics and Investigations	3
CYB 730	Computer Criminology	3
CYB 735	Network Forensics	3



Cyber Response

CYB 740	Incident Response and Remediation	3
CYB 745	Secure Operating Systems	3
CYB 750	Offensive Security and Threat Management	3



Governance & Leadership

CYB 755	Security Administration	3
CYB 760	Cybersecurity Leadership and Team Dynamics	3
CYB 765	Cybersecurity Management	3



Security Architecture

CYB 770	Security Architecture	3
CYB 775	Applied Cryptography	3
CYB 780	Software Security	3
CYB 785	Cyber Physical System Security	3

**Students may choose to complete either CYB 780 or CYB 785 to satisfy track requirements.*

Capstone Courses

Course Number		Credits
CYB 789	Cybersecurity Pre-Capstone	1
CYB 790	Cybersecurity Capstone	3

CAPSTONE

For the final course, the capstone experience, you will apply what you've learned in the program to develop a project and get hands-on experience at a real workplace. Each project is tailored to a student's interests and career goals and often leads to job opportunities and professional connections. Graduates of other UW online programs have completed capstone projects for organizations such as GE Healthcare and the Green Bay Packers.

ADMISSIONS REQUIREMENTS

- Bachelor's degree with, at minimum, a 3.0 GPA
- Prerequisite coursework in Introduction to Computer Science—which must include programming content, and prerequisite coursework in Calculus or Statistics
- Your resume
- Two letters of recommendation (can be professional or academic)
- Up to 1,000 word statement of personal intent describing your decision to pursue the degree and what you believe you will bring to the cybersecurity field

No GRE or GMAT required. Campuses may waive some of these requirements as part of the comprehensive application process.

Enroll any semester, spring, summer, or fall.

TUITION | \$850 PER CREDIT

The same flat-rate tuition is offered to both Wisconsin residents and students who live out of state. Financial aid and/or veteran's assistance may be available to you and is awarded by your home campus.

Textbooks are purchased separately and are not included in tuition. Being an online program, there are **no additional course or program fees such as segregated or technology fees**. If software or special technology is required in one of your courses, it will be provided to you and is included in your tuition.

QUESTIONS?

Get in touch with an enrollment adviser who can answer your questions, help you decide if this program is a good fit, and, when you're ready, walk you through the application process.

Call 1-608-800-6762

**Email learn@uwex.wisconsin.edu
uwex.wisconsin.edu/cybersecurity**

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