

# Master of Science in Cybersecurity

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The Master of Science in Cybersecurity represents a comprehensive, multidisciplinary curriculum that prepares students to advance their careers and pursue their academic ambitions through leadership and management positions within the cybersecurity field. The degree represents a fully online, asynchronous curriculum comprised of 34 credits to include 7 core courses, 3 track courses, and 2 capstone courses (a one-credit capstone preparation course and a three-credit capstone course) to satisfy degree requirements. UW-Green Bay, UW-La Crosse, UW-Oshkosh, UW-Parkside, UW-Platteville, UW-River Falls, UW-Stevens Point, and UW-Superior offer the program jointly. The program equips students with the skills needed to effectively develop, implement and maintain a security strategy within diverse organizations and industry sectors. Core courses provide students with a solid foundation in data and network security, compliance, strategic planning, program design and management, legal and ethical issues in cybersecurity, cryptography, risk management and technical communications. Students must complete one of four unique tracks which assist students in tailoring their coursework to meet their career goals: digital forensics, cyber response, governance and leadership, and security architecture. The curriculum was developed in alignment with defined requirements of the Center for National Centers of Academic Excellence in Cyber Defense (CAE-CD) and several established and recognized industry certifications.

## Learning Outcomes

1. Analyze and resolve security issues in networks and computer systems to secure an IT infrastructure.
2. Design, develop, test and evaluate secure software.
3. Develop policies and procedures to manage enterprise security risks.
4. Evaluate and communicate the human role in security systems with an emphasis on ethics, social engineering vulnerabilities and training.
5. Interpret and forensically investigate security incidents.

## Admission Requirements

Each student's prior academic background is evaluated by the UW-Green Bay program Chair. Students who show exceptional promise but lack the minimal prerequisites may be admitted provisionally. Applicants are not required to take the GRE for admission.

A completed application consists of a UW-Green Bay Graduate Application form (<https://apply.wisconsin.edu/>), resume, two letters of evaluation or recommendation letters, official transcripts (undergraduate and graduate), and a \$56.00 application fee.

*Minimum Admission to the Master of Science in Cybersecurity program requires:*

- A baccalaureate degree from an accredited institution
- A minimum of a 3.0 grade point average (GPA) based on a 4.0 scale.
- Prerequisite coursework in Introduction to Computer Science (which must include significant programming content) and prerequisite coursework in Calculus or Statistics. Please contact an enrollment adviser for details.
- Two letters of evaluation or recommendation letters (can be professional or academic)
- Resume
- A personal statement describing the reasons behind your decision to pursue this degree and what you believe you will bring to the MS Cybersecurity program. Space for the personal statement is included in the online application.

International students will also need to provide the following documentation:

- A test of English proficiency (TOEFL or IELTS)
- Course-by-course transcript evaluation from a professional evaluation service currently recognized by NACES ([www.naces.org](http://www.naces.org) (<http://www.naces.org/>)).
- UW-Green Bay recommends one of the following evaluation services:
  - Educational Credential Evaluators (ECE) <http://www.ece.org/>
  - World Education Services (WES) <http://www.wes.org/>
- Please note that this program is entirely online. International students are welcome to apply for and enroll in an online program. However, they are unable to apply for an F-1 or J-1 visa based on enrollment in this program.

## Degree Requirements (<http://catalog.uwgb.edu/graduate/graduate-programs/cybersecurity-ms/emphasis/>)

The Master of Science in Cybersecurity program is 100% online and offers four tracks of study to personalize student learning with tracks in Digital Forensics, Cyber Response, Governance & Leadership, and Security Architecture. The 34 credit program prepares students for careers in cybersecurity, protecting organizations, and important information in various industries.

Students must complete requirements in one of the following areas of emphasis:

- Digital Forensics (<http://catalog.uwgb.edu/graduate/graduate-programs/cybersecurity-ms/emphasis/#digitalforensicstext>)
- Cyber Response (Defense, Incident & Attack Response) (<http://catalog.uwgb.edu/graduate/graduate-programs/cybersecurity-ms/emphasis/#cyberresponsetext>)
- Governance & Leadership (Communication, Management, Policy, Compliance) (<http://catalog.uwgb.edu/graduate/graduate-programs/cybersecurity-ms/emphasis/#governanceleadershiptext>)
- Security Architecture (Systems, Software, Data) (<http://catalog.uwgb.edu/graduate/graduate-programs/cybersecurity-ms/emphasis/#securityarchitecturetext>)

## Progress to Degree

### Steps Toward the Degree

1. The candidate applies to the Master of Cybersecurity program by submitting an application, official transcripts, resume, statement of intent and two letters of reference to the University of Wisconsin-Green Bay.
2. The candidate is admitted to the Master of Cybersecurity program by the program Chair.
3. The student completes an Official Declaration of Master's Degree (GR-1 Form) indicating the area of emphasis they are completing.
4. The student fulfills the degree requirements for the program.
5. The student is awarded a Master of Cybersecurity degree from the University of Wisconsin-Green Bay.

## Faculty

**Michael E Zorn**; Professor; Ph.D., University of Wisconsin - Madison\*

**Tanim Ahsan**; Associate Professor; Ph.D., Marquette University\*

**Iftekhar Anam**; Associate Professor; Ph.D., University of Memphis\*

**Nazim Choudhury**; Associate Professor; Ph.D., University of Sydney\*

**Omar Meqdadi**; Assistant Professor; Ph.D., Kent State University\*