

CYBERSECURITY

Master of Science (MS) Face to Face and Online Delivery

This is a guide based on the 2024-2025 Graduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on factors such as dual enrollment, remediation, and summer enrollment. Students meet with an academic advisor each semester and use Degree Works to monitor their progress.

CURRICULUM CHECKLIST

30 Hours Required

Core Requirements

- CY501 Introduction to Cybersecurity (3)
- CY510 Information Security and Assurance (3)
- CY520 Info Security in System Admin (3)
- CY530 Computer Network Security and Defense (3)
- CY620 Advanced Computer Forensics (3)

Choose one thesis area:

Thesis area

- CY655 Research Methods in Cybersecurity (3)
- CY691 Thesis Research I (3)
- CY692 Thesis Research II (3)
- GR699 Master's Oral Examination (0)
- Choose 6 hours of electives from the list below; at least 3 hours must be at the 600 level (6)

Non-Thesis area

- CY690 Graduate Project (0)
- GR698 Master's Final Comprehensive Examination (0)
- Choose 15 hours of electives from the list below; at least 12 hours must be at the 600 level (15)

Electives may be chosen from the following:

- CS506 Distributed Cloud Computing (3)
- CS6xx Computer Science 600 level (except CS605 & CS690) (3)
- CY610 Web Application Security (3)
- CY643 Independent Study (3)*
- CY650 Legal, Risk and Compliance for Security (3)
- CY653 Special Topics in Cybersecurity (3)*
- CY660 Cyber Operations (3)
- CY662 Ethical Hacking (3)
- CY670 Secure Operating Environments (3)
- CY699 Internship (3)*
- MA510 Mathematical Foundations (3)
- MA664 Computational Cryptography (3)
- TN562 Introduction to Networks (3)
- TN564 Routing and Switching Essentials (3)

*May be taken once for credit on program

Admission Requirements

In addition to the criteria established for general admission to graduate studies, applicants must have the following:

- 1.** A bachelor's degree in cybersecurity or related field*
* Students with bachelor's degrees from other fields will be required to take up to two prerequisites related to Fundamentals of Computing and Programming.
- 2.** An undergraduate GPA of 3.0 on a 4.0 scale
- 3.** Six completed hours of science and six completed hours of mathematics in the undergraduate degree

Probationary Admission

Applicants who do not meet the general and/or program's admission requirements may be considered for probationary admission upon approval by the graduate program coordinator. While under probation, students must complete nine credit hours that count toward the degree with a grade of "B" or better to continue in the program.

For graduate studies admissions deadlines, visit

<https://semo.edu/admissions/requirements/graduate.html>.

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2024-2025 *degree map*

