

CYBERSECURITY

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

This is a guide based on the 2026-2027 Graduate Catalog 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 computer science, cybersecurity, computer information systems or related field*
2. An undergraduate GPA of 3.0 or higher on a 4.0 scale

*Degrees earned from a U.S.A. regionally accredited institution or foreign equivalent

Provisional Admission

Students with bachelor's degrees* from non-related fields (see list above) with evidence of readiness for graduate study will be required to take up to two prerequisites related to Fundamentals of Computing and Programming (provisional admission).

Provisional admission can be combined with probationary admission below.

Probationary Admission

A student with an undergraduate GPA of 2.50 to 2.99 on a 4.0 scale may be asked to provide additional evidence of readiness for graduate study such as:

- Significant professional experience (3+ years) in CS/IT/Security fields
- Recognized industry certifications such as Security+, CEH, AWS Cloud Practitioner, or similar credentials
- Discipline-specific projects/portfolio verifiable links such as GitHub
- Two letters of recommendation from supervisor and/or academic advisor

These students must also meet bachelor's degree* requirements mentioned above (probationary admission can be combined with provisional admission).

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>.

Revised 8/5/2026

DEGREE MAP 2026-2027



SOUTHEAST MISSOURI
STATE UNIVERSITY · 1873

RESHMI MITRA / (573) 651-2920 / CSgradprograms@semo.edu
SOUTHEAST ONLINE / (573) 651-2766 / OGS@semo.edu