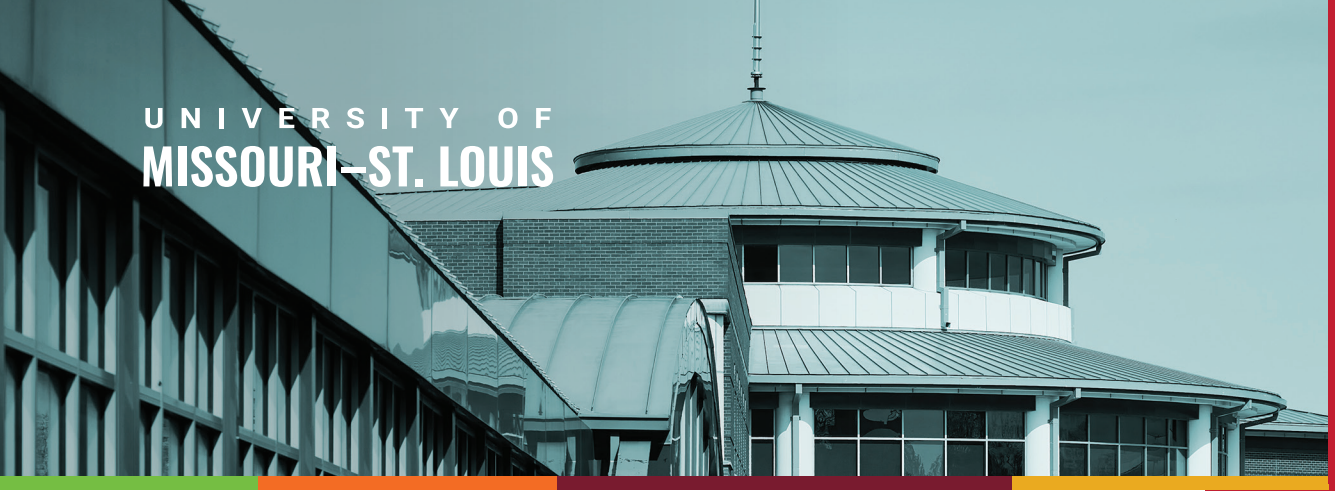

UNIVERSITY OF
MISSOURI–ST. LOUIS

2-YEAR
ACADEMIC
MAP

Cybersecurity MS

with an emphasis in Information Systems and Technology

The Master of Science in Cybersecurity–Information Systems and Technology emphasis provides students both technical and business skills. It is a 30-credit hour STEM designated degree designed for professionals from diverse undergraduate backgrounds who wish to transition into the management of information security or general IT management roles. The program focuses on applied aspects of cybersecurity. Hands-on projects, research courses and state-of-the-art physical and virtual cybersecurity labs offer an exclusive experience that is tailored around the student. UMSL is designated as a National Center of Academic Excellence in Cyber Defense Education (CAE-CDE) making students eligible for grants, scholarships, and numerous job opportunities at government agencies.

Career Outlook

Cybersecurity is one of the most critical issues facing individuals, organizations, governments, and society. Industry and government reports indicate a continued severe shortage of skilled cybersecurity talent across both public and private sectors. The MS (Cybersecurity–Information Systems and Technology emphasis) is geared toward the management of cybersecurity and the protection of organizational information assets. Due to the value they bring, graduates are hired by local and national companies and quickly rise in cybersecurity management roles. They enjoy high job satisfaction and compensation in their careers.

Future Career Options

- Chief Information Security Officer
- Cyber-crime Analyst
- Cybersecurity Analyst
- Cybersecurity Architect
- Cybersecurity Consultant
- Cybersecurity Manager
- Cybersecurity Specialist
- Incident Analyst
- IT Auditor
- Penetration and Vulnerability Tester

Skills Developed By Degree Completion

- Apply fundamental security principles and formal security models to solve many complex problems in cybersecurity
- Develop, maintain, and update an organization's information security policies to meet security and compliance requirements
- Select and execute appropriate security mechanisms to implement security policies of an organization
- Evaluate and maintain information systems for secure and reliable operations by employing appropriate risk management strategies
- Communicate cybersecurity issues effectively to a range of audiences
- Function effectively as a leader or member of a team engaged in activities appropriate to the cybersecurity discipline

Successful alumni have gone on to fulfill many of the opportunities above. Additional possibilities are taken from the Bureau of Labor Statistics. Contact an advisor to discuss additional future career options.

UMSL Business
University of Missouri–St. Louis

College of Business Administration
202 Anheuser-Busch Hall
314-516-5882
umsl.edu/business

Graduate Academic Advising
104 Anheuser-Busch Hall
314-516-5885
MBA@umsl.edu
mba.umsl.edu

IT STARTS RIGHT NOW

This is a sample academic map for the courses to take each academic semester/session. This map is not a substitute for academic advisement. Contact your advisor when making final selections.

APPLY FOR GRADUATION

Don't forget that students should apply for graduation one year prior to the intended graduation date, so apply prior to the deadline.

umsl.edu

888-GO-2-UMSL
314-516-5451
umsl.edu/gradschool

2024-2025 2-YEAR ACADEMIC MAP

Master of Science in Cybersecurity
with an emphasis in Information Systems and Technology

Check once completed

Year 1

FALL SEMESTER (6 credit hours)
- INF SYS 6828: Principles of Information Security (3)
- INF SYS 6836: Management of Data Networks and Security (3)

SPRING SEMESTER (6 credit hours)
- INF SYS 6858: Advanced Cybersecurity Concepts (3)
- INF SYS 6820: Systems and IT Infrastructure (3)

SUMMER SEMESTER (3 credit hours)
- INF SYS 6847: Project Management (3)

Year 2

FALL SEMESTER (9 credit hours)
- INF SYS 6878: Management of Information Security (3)
- INF SYS 6868: Software Assurance (3)
- Approved Elective (3)

SPRING SEMESTER (6 credit hours)
- INF SYS 6888: Capstone in Information Security (3)
- Approved Elective (3)

Last updated May 2024