



# Information Systems and Technology MS

The Master of Science (Information Systems and Technology) is designed to provide students the technical and managerial knowledge to work successfully in careers associated with the design, development, and management of information systems. The MSIST is a 30-credit hour STEM designated degree in which students gain advanced knowledge and skills in application development, business intelligence, cybersecurity, cloud computing, and other emerging areas that impact organizational information systems strategies. MSIST students interact extensively with their peers as well as with industry executives in a carefully curated academic environment that provides them numerous growth opportunities and enables them to specialize in areas of interest to them.

## Career Outlook

The US Bureau of Labor Statistics projects double-digit growth in IT jobs over the coming decade. Information Systems and Technology MS graduates are prepared with advanced skills to apply IT and business knowledge to understand the technology landscape, help organizations streamline their business processes with the aid of technology and enable the alignment of IT plans with business plans. Due to the value they bring, graduates are hired by local and national companies and quickly rise in technology management roles. They enjoy high job satisfaction and compensation in their careers.

## Future Career Options

- Application Developer
- Business Analyst
- Business Intelligence Analyst
- Chief Information Officer
- Cloud Architect
- Computer Network Architect
- Cybersecurity Analyst
- Database Administrator
- IT Manager
- Helpdesk Manager
- Technical Writer

## Skills Developed By Degree Completion

- Evaluate and implement effective IS leadership principles and strategy
- Prioritize and propose managerial practices to develop and deploy technological innovations that produce business advantage
- Explain best practices in systems analysis and design
- Support and improve current best practices in application development, business intelligence, cybersecurity, and legacy systems
- Exhibit specialized leadership and technical expertise

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.



# 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](https://umsl.edu)

888-GO-2-UMSL  
314-516-5451  
[umsl.edu/gradschool](https://umsl.edu/gradschool)

## 2024-2025 ACADEMIC MAP

### Master of Science in Information Systems and Technology

We tailor the degree by building in flexibility to meet your needs, experience, and interest areas.

Students receive a customized course of study based on their academic background and can be completed in the time suitable for you!

The Information Systems and Technology MS can be completed with 30 credit hours.\*

#### REQUIRED COURSES:

INF SYS 5800: Management Information Systems (3)

One Elective Course (3)

#### CHOOSE TWO GRADUATE CERTIFICATES TO FOCUS YOUR DEGREE:

Business Intelligence

Cybersecurity

Enterprise Systems Development

Information Security Management and Auditing

Information Systems and Technology

#### Exciting courses offered this year:

Applications of Programming for Business Solutions

Artificial Intelligence Applications for Business and Cybersecurity

Data Programming for Business Intelligence

Data Warehouse Design and Implementation

Principles of Information Security

Web Applications for Business

\*Students may need to take prerequisites. Please consult with your advisor.

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