

Information Systems and Technology, MS

Admission Requirements

Applicants must meet the general graduate admission requirements of the Graduate School, described in the UMSL catalog. Students are considered for admission to the graduate program in Information Systems and Technology only after they have formally applied for admission through the Graduate School. Applications may be completed online.

In addition to Graduate School admission requirements, the following requirements apply for the MSIST program.

Applicants must have an undergraduate degree with a minimum cumulative GPA of 3.0. Students whose GPAs are between 2.75 and 2.9 may be admitted under a restricted status within the terms specified by the Graduate School.

Applicants must have foundational knowledge of data analysis and computer programming. This requirement can be fulfilled by providing evidence of prior coursework, training, or professional experience.

Applicants may also join the program without this background and complete the following coursework.

- Students without a background in data analysis could take SCMA 5300 as a graduate student to fulfill this requirement.
- Students without a background in computer programming can take INFSYS 6805 as a graduate student to fulfill this requirement.

Entrance Examinations

- This program generally requires the Graduate Management Admissions Test (GMAT) or Graduate Record Examination (GRE) scores. A waiver of this requirement may be requested if applicants meet certain criteria. Please see the petition to waive the GMAT: <http://mba.umsl.edu/files/pdfs/GMAT-waiver.pdf>.
- Non-native speakers of English must provide evidence of English language competency by submitting an official TOEFL or IELTS score. The minimum TOEFL score for graduate admission is 79 iBT. The minimum IELTS score is 6.0.

Degree Requirements

~~The program may require as few as 30 hours for students with undergraduate business degrees from AACSB-accredited institutions. Because of the need to attain general business core competencies as a foundation of the MS in IS requirements, students with no academic business background will be required to take additional hours as outlined below.~~

Candidates for the Master of Science in Information Systems and Technology must meet all Graduate School requirements including, but not limited to, requirements on admissions, enrollment, course policies, and academic standing as listed in the University Bulletin.

The program requires a total of 30 hours for students with either business or non-business undergraduate degrees.

General Requirements

~~All students must meet course requirements in quantitative reasoning, general business and IS. Students complete 30 credit hours beyond the general business core. Of the 30 hours beyond the general business core, at least 24 hours must cover topics beyond INFSYS 5800 and INFSYS 6805. Students with a B.S.B.A. with an emphasis in IS or a B.S. in IS from an AACSB-accredited institution may, at the student's discretion, substitute two electives for INFSYS 5800 and INFSYS 6805. Waivers may be granted for other courses with appropriate undergraduate coursework.~~

Quantitative Reasoning Requirement

~~Students are required to have completed by the end of their first semester in the program the equivalent of SCMA 5300 Statistical Analysis for Management Decisions with a grade of C or better. This course does not count towards the graduate degree, but a waiver may be granted with appropriate undergraduate coursework.~~

General Business Core

~~Students must have a B.S. in IS, or a B.S.B.A. with an emphasis in MIS that requires a managerial communication course, and coursework equivalent to at least five of the following courses:~~

ACCTNG 5400	Financial and Managerial Accounting	3
FINANCE 6500	Financial Management	3
MGMT 5600	Managing People in Organizations	3
MKTG 5700	Contemporary Marketing Concepts	3
SCMA 5320	Production and Operations Management	3
BUS AD 6990	Strategy Formulation and Implementation	3

Students who have not met this prerequisite must complete BUS AD 5100 Managerial Communication and course work from at least five of the courses listed above.

Program Requirements

A. Basic IS courses		
INFSYS 5800	Management Information Systems	3
INFSYS 6805	Applications of Programming for Business Solutions	3
INFSYS 6840	Information Systems Analysis	3
INFSYS 6845	Database Management Systems	3
INFSYS 6850	Information Systems Design	3
Select five of the following:		15
INFSYS 5890	Graduate Internship in Information Systems ⁻¹	
INFSYS 5899	Individual Research in Information Systems	
INFSYS 6806	Managerial Applications of Object-Oriented Technologies	
INFSYS 6807	Contemporary z/OS COBOL	
INFSYS 6808	Advanced Object-Oriented Programming for Business	

INFSYS 6817	Advanced COBOL and Modern z/OS System Tools
INFSYS 6818	Management of Software Testing
INFSYS 6828	Principles of Information Security
INFSYS 6833	Decision Support Systems for Business Intelligence
INFSYS 6836	Management of Data Networks and Security
INFSYS 6838	Business Processes: Design, Management and Integration
INFSYS 6846	Global Sourcing and Automation of Business Services
INFSYS 6847	Project Management
INFSYS 6848	Knowledge Management and Business Intelligence
INFSYS 6849	Data Warehouse Design and Implementation
INFSYS 6858	Advanced Cybersecurity Concepts
INFSYS 6860	Data Integration
INFSYS 6868	Software Assurance
INFSYS 6878	Management of Information Security
INFSYS 6881	Management of Transnational Information Systems
INFSYS 6891	Seminar in Information Systems
A maximum of 2 courses outside IS. Courses outside the College of Business must be approved by the IS department chairperson.	
Total Hours	30

⁴ -A maximum of 3 credit hours of INFSYS 5890 may count toward the degree.

All students will complete:

- INFSYS 5800 (3 hours)
- The requirements for two of the certificates listed (24 hours):
 - Graduate Certificate in Enterprise Systems Development
 - Graduate Certificate in Information Security Management and Auditing
 - Graduate Certificate in Information Systems and Technology
 - Graduate Certificate in Business Intelligence
- One elective course from the list below or from the certificates above (3 hours). Courses may also be substituted with other courses upon approval from the Department Chair:

Cybersecurity Courses

INFSYS 6836	Management of Data Networks and Security	3
INFSYS 6858	Advanced Cybersecurity Concepts	3
INFSYS 6864	Applied Cryptography for Business Applications	
INFSYS 6888	Capstone in Information Security	3

Information Systems and Technology Management

INFSYS 6832	Information Systems Strategy	3
INFSYS 6838	Business Processes: Design, Management and Integration	3
INFSYS 6846	Global Sourcing and Automation of Business Services	3
INFSYS 6847	Project Management	3

Experiential Learning, Research, and Emerging Topics

INFSYS 5890	Graduate Internship in Information Systems	1-6
INFSYS 5899	Individual Research in Information Systems	1-3
INFSYS 6891	Seminar in Information Systems	3

Rationale

Note to catalog editor: current entry has College admission requirements.
Admission requirements have become program specific.