

Master of Science in Information Technology

Catalog Year: 2025

Total Degree Credit hours: 30 at the 6000 level or above

A student with an insufficient computing background may be required to take up to 4 of the following IT foundation courses. Completing all 4 foundation courses meets the requirements of the Graduate Certificate in IT Foundations.

Information Technology Foundation Courses (12 Credit Hours)

	Prerequisites		
IT 5413 Software Design and Development	None	3	
IT 5423 Computer Networks and System Administration	None	3	
IT 5433 Databases: Design and Applications	None	3	
IT 5443 Web Technologies and Application Development	IT 5413	3	

Required Core Courses (12 Credit Hours)

	Prerequisites		
IT 6203 IT Design Studio	IT 5433 and IT 5443	3	
IT 6433 IT Management	None	3	
IT 6443 Data Processing and Technologies	IT 5433	3	
IT 6823 Information Security Concepts and Administration	IT 5423	3	

MSIT Program Options

A) **Capstone Option:** Students will complete the IT 7993 IT Capstone course and 15 credit hours from the Elective Course list.

	Prerequisites		
IT 7993 IT Capstone	IT 6203, IT 6433 and IT 6443	3	
		3	
		3	
		3	
		3	
		3	

B) **Thesis Option:** Students will take IT 7999 Thesis over the course of 2 semesters and complete 12 credit hours from the Elective Course List.

	Prerequisites		
IT 7999 Thesis	Permission of Program Director	6	
		3	
		3	
		3	
		3	

Electives

Depending on whether students take the capstone or the thesis option, they are required to complete 5 or 4 elective courses, respectively. In addition to the Information Technology electives listed below, students may take a maximum of 1 elective from 6000-level or higher courses from the prefixes FIS, CS, SWE, IS, DS, STAT, or MGT, subject to Credit for Duplicate Courses policy and course prerequisites. Credit may not be awarded for the same course twice, or for courses deemed so similar as to be considered the same. **Electives can be taken by focus area to also earn embedded graduate certificates while completing the MSIT program. Students may take electives freely from any focus area to complete MSIT requirements, however it is generally a good idea for students to choose a focus area in their program of study.**

	Prerequisites		Focus Area
IT 6923 Blockchain Technology in Payments	FIS 6810	3	
IT 6933 Machine Learning Technology in FinTech	None	3	AI & Cloud Technology
IT 7103 Practical Data Analytics	None	3	Data Analytics & Intelligent Technology
IT 7113 Data Visualization	IT 5433	3	Data Analytics & Intelligent Technology
IT 7123 Business Intelligence Systems	IT 5433	3	AI & Cloud Technology, Data Analytics & Intelligent Technology

IT 7133 Enterprise AI Applications	None	3	AI & Cloud Technology, Data Analytics & Intelligent Technology
IT 7143 Cloud Analytics Technology	None	3	AI & Cloud Technology, Data Analytics & Intelligent Technology
IT 7303 Data Privacy Technologies	IT 6823	3	IT Security
IT 7313 Physical IT Systems Security	IT 6823	3	IT Security
IT 7323 Computer Forensics	IT 6823	3	IT Security
IT 7333 Enterprise Cloud and Wireless Security	IT 6823	3	AI & Cloud Technology
IT 7343 Ethical Hacking: Network Security & Penetration Testing	IT 6823	3	IT Security
IT 7503 Foundations of Health Information Technology	None	3	Enterprise IT Management
IT 7533 Health Information Security and Privacy	IT 7503	3	IT Security
IT 7703 IT Policy and Law	Concurrent: IT 6433	3	Enterprise IT Management
IT 7733 Fundamentals of Enterprise Cloud	None	3	AI & Cloud Technology, Enterprise IT Management
IT 7743 Database Administration	IT 5433	3	Enterprise IT Management
IT 7753 IT Service Delivery	IT 5423	3	Enterprise IT Management
IT 7763 IT System Acquisition & Integration	IT 5413 or IT 5433	3	Enterprise IT Management
IT 7900 Special Topics in Information Technology	Varies	1-3	
IT 7913 Research Seminar in IT	None	3	
IT 7923 Advanced Web Technologies	IT 6203	3	
IT 7993 IT Capstone	IT 6203, IT 6433 & IT 6443	3	
IT 7998 Directed Study in Information Technology	Permission of Program Director	3	
IT 7999 Thesis	Permission of Program Director	3	
CSE 7983 Graduate Internship	9 CCSE graduate credit hours & good standing	3	

Graduate Certificate in AI & Cloud Technology

12 Credit Hours

Required Courses

- IT 7133
- IT 7733

Elective Courses (choose 2)

- IT 6823
- IT 6933
- IT 7123
- IT 7143
- IT 7333

Graduate Certificate in IT Security

12 Credit Hours

Required Courses

- IT 6823

Elective Courses (choose 3)

- IT 7303
- IT 7313
- IT 7323
- IT 7333
- IT 7343
- IS 7330* Disaster Recovery & Business Continuity
- IT 7533

Graduate Certificate in Data Analytics & Intelligent Technology

12 Credit Hours

Required Courses

- IT 7103
- IT 7123

Elective Courses (choose 2)

- IT 7113
- IT 7133
- IT 7143
- DS 7900*
- STAT 7020* or STAT 8240*

Graduate Certificate in Enterprise IT Management

12 Credit Hours

Required Courses

- IT 6433

Elective Courses (choose 2)

- IT 7503
- IT 7703
- IT 7733
- IT 7743
- IT 7753
- IT 7763

**Special permission is required from the department or program director in charge of the course to be able to register.*