INFORMATION TECHNOLOGY, MASTER OF SCIENCE

The Master of Science (M.S.) in Information Technology program is designed to attract IT professionals in the Science, Technology, Engineering and Mathematics (STEM) fields who wish to advance their career opportunities in information technology industries. (An additional 3 credits may be required for applicants who are unable to demonstrate competencies in the foundation areas.) The mission of the MSIT program is to equip students with the advanced knowledge, skills and IT competencies required to be effective leaders in diverse, multi-disciplinary IT enterprises. This MSIT program offers an in-depth understanding of information technology and cybersecurity, as well as social, legal, and managerial issues in the field.

The program is ideal for those working or planning to work in the following areas:

- Information Security
- Web Technology
- Digital Forensics
- Web Programming
- Client and Server Site Technology
- Cybersecurity

Program Delivery and Tuition Rate

This program is delivered through online instruction, providing flexibility and convenience for busy individuals balancing work, family and personal obligations. Students may complete the program on a full-time or part-time schedule. Full-time enrollment for students who want to complete the program in 20 months requires enrolling in 9 credits per term and in 3 to 6 credits during the summer terms. Part-time students may complete the program in 24-27 months. The program is billed at the non-MBA rate.

Admission

Admission to this program is selective. This program enrolls new students in the fall, spring, and summer terms. Applicants should possess a bachelor's degree with foundational knowledge or experience in computer programming and computer networks. A candidate who is found to be lacking the proper foundational knowledge may be accepted into the program, but will be required to take the additional 3-credit MSIT foundation course:

Code	Title	Credits
INFT 6122	Essentials of Information Technology	3

Application

Please see the Graduate Admissions (http://catalog.sunyempire.edu/graduate/admission/) pages of this catalog for a complete listing of materials required to complete a graduate application.

Program Curriculum

The MSIT program has seven core courses which emphasize fundamental information technology skills in computer security and web technology, two electives and a project based capstone that includes hands-on, real-world practices in the student's field of interest.

Code	Title	Credits
Foundation Course		
INFT 6122	Essentials of Information Technology [1]	3
Core Courses		
INFT 6127	Information Technology in Organizations	3
INFT 6132	Network Administration	3
INFT 6137	Enterprise Systems Architecture	3
INFT 6142	Computer Systems Security	3
INFT 6045	IT Security Policies & Procedure	3
INFT 6015	Database Design and Management	3
INFT 6040	Advanced Internet Application Development	3
Elective 1		3
Elective 2		3
INFT 7010	Information Integration Strategies	3
Total Credits 30-33 [1]		

[1] Applicants to the MSIT program who cannot demonstrate foundation knowledge in computer programming and computer networks will be required to take the additional 3-credit course INFT 6122 Essentials of Information Technology. This will result in a 33-credit degree.

Upon successful completion of the program, students will be able to:

- Disciplinary Knowledge: Identify and apply IT principles, method and frameworks for the business enterprise and the relevant technology;
- Professional Decision Making: Strategic analysis, design, implement and evaluation of computer technologies, systems, processes, components and/or programs appropriate to a defined task, while analyzing the impact on existing systems and potential future applications;
- Master of Methods and Tools: Critically evaluate relevant technical and business information and emerging industry trends from multiple sources;
- Capacity for Innovation and Collaboration: Implement effective IT solutions that demonstrates appropriate consideration of alternative computer technologies, including networks, servers, programming languages and database systems; Develop, analyze and defend solutions to networking and security problems that demonstrate an appropriate balance among security needs, business concerns, confidentiality, availability and system integrity; and
- Ethics and IT Compliance: Acknowledge and adhere to the Law and Policy Regulation, standards of ethics, including relevant industry and organizational codes of conduct, in the design of technology.