CYBERSECURITY, MASTER OF SCIENCE

The Empire State University Master of Science (M.S.) in Cybersecurity is a 30-33 credit, fully online program. This program offers students an in-depth understanding of technology, policy, and security measures that are necessary for information security implementations. Upon graduation, students will be prepared to design and execute sophisticated solutions that protect global systems and infrastructures.

The 30-credit pathway is designed to attract IT professionals in the Science, Technology, Engineering, and Mathematics (STEM) fields who wish to advance their career opportunities in the cybersecurity field. To prepare students new to the field, the program offers an alternate 33-credit pathway which includes an additional 3-credit IT essentials course taken in the first term. The 30-33 credit M.S. in Cybersecurity degree program may be completed within two years.

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 and spring 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 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

Code	Title	Credits
Foundation Course		
INFT 6122	Essentials of Information Technology [1]	3
Core Courses		
INFT 6045	IT Security Policies & Procedure	3
INFT 6065	Ethical Hacking and Network Defense	3
INFT 6070	Cybersecurity Risk Analysis and Management	3
INFT 6132	Network Administration	3
INFT 6142	Computer Systems Security	3
INFT 6147	Enterprise Information Security Management	3
INFT 6157	Data and Application Security	3
Elective 1		3
Elective 2		3
Capstone Course		
INFT 7005	Cyber Security Integration Strategies	3
	Total Credits 30-33 [1]	

[1] *Applicants must demonstrate foundation knowledge in computer programming and computer networks. Applicants who are found to be lacking this foundational knowledge must take INFT 6122.*

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

- Disciplinary Knowledge: Demonstrate knowledge and understanding of the policies and stakeholders and to secure a computer-based system, process, or program to meet business needs.
- Professional Decision Making: Analyze and resolve security issues in networks and computer systems to secure an IT infrastructure. Also, design, develop, test and evaluate secure software.
- Master of Methods and Tools: Apply current techniques, skills, and tools necessary for cyber defense within an organization.
- Capacity for Innovation and Collaboration: Develop policies and procedures to manage enterprise security risks. Analyze the local and global impact of computing on individuals, organizations, and society.
- Ethics and IT Compliance: Describe professional, ethical, legal, security, and social issues and responsibilities related to computing.