Graduate Cyber Security

Alberto La Cava, Ph.D., Director, M.S. in Cyber Security

The Master of Science in Cyber Security degree is a 30 credit hour program designed for working professional and full-time and part-time students who wish to increase their knowledge and skills related to the field of cyber security and information assurance. The degree will provide students with the knowledge and practice to understand cyber security threats and vulnerabilities, and to be able to help defend computer systems against cyber-attacks. A capstone experience is included for students to work in teams to build and launch a cyber security start-up company.

Program Availability

The program is offered in the evening on a trimester schedule and designed for both full-time and part-time study at the main campus in Jersey City. Courses are offered in the classroom, online, and hybrid.

Degree Requirements

The degree requires 30 semester hour credits. A capstone course is taken the final trimester of coursework. The capstone course provides students with the opportunity to carry out in depth research on a specified topic in cyber security. The student's project, which is to work in teams to build and launch a cyber security start-up company, reflects the integration and application of the cyber security knowledge gained over the course of the program.

Graduate Internship Requirement

Completion of a graduate internship related to Cyber Security, minimum of six months, is required for all students except; those who have 3+ years of professional work experience; those with full-time employment during the length of the program; and those who are participating in the exchange program. The graduate internship must start in the first semester of classes. Please consult your program advisor to determine if it is possible to obtain a waiver. There are opportunities to work in the University Cyber Security Center as a Group Leader or Analyst.

Advisement

The Director of the program assigns a full-time academic advisor from the Department of Computer & Information Sciences to every candidate.

Time Limitation

Students are expected to enroll continuously until their programs are completed. Students are required to maintain satisfactory academic progress by maintaining the required grade point average and accumulating sufficient credits within the stipulated time frame of five years. By federal regulation, F-1 International students must enroll as full-time students, so their time to completion will be considerably shorter.

Curriculum - Master of Science in Cyber Security (30 Credit Requirement)

CY-502	Information System Security Professional	3
CY-510	Cyber Security Planning & Risk Analysis	3.00
CY-520	Cyber Security Ethical & Legal Concerns	3.00
CY-530	Cryptography	3.00
CY-540	International Communication & Networking	3.00
CY-550	Mobile Computing and Wireless	3.00
CY-610	Ethical Hacking and Penetration Testing	3.00
CY-620	Malware Analysis and Defense	3.00
CY-630	Disaster Recovery	3.00
CY-635	Advanced Research in Cyber Security	3.00
CY-640	Cybercrime and Digital Forensics	3.00
CY-645	Blockchain Technologies	6
CY-650	Cyber Security Capstone	3.00