The Department of Computer Science administers the MS in Cyber Security and Privacy (MSCSP). The courses supporting the MSCSP program are divided in three categories: (i) Core; (ii) Elective; (iii) Foundational. An MSCSP student may require the background represented by Foundational courses in order to prepare for the Core and Elective courses.

An MSCSP course program must satisfy the following distribution requirement:

- 30 credits are required, which can be satisfied as either one of the following options:
  - Courses (30 credits)
  - Courses (27 credits) + MS Project (3 credits)
  - Courses (24 credits) + MS Thesis (6 credits)

- All Core courses are required.
- At most two courses can be Foundational courses.
- At most two courses can be chosen from outside the Department of Computer Science.

If a student chooses the MS project or MS thesis option, the project or thesis must be related to cyber security.

Information about course prerequisites can be found in the “Degree Requirements” document.

**Core Courses**

CS 608 - Cryptography and Security  
CS 645 - Security and Privacy in Computer Systems  
CS 646 - Network Protocols Security  
CS 647 - Counter Hacking Techniques  
CS 656 - Internet and Higher-Layer Protocols  
  (or ECE 637 - Internet and Higher Layer Protocols*)  
CS 696 - Network Management and Security  
  (or ECE 638 - Network Management and Security*)

*Substitution allowed only for students with ECE background and with the permission of the graduate advisor.

**Elective Courses**

CS 633 - Distributed Systems  
CS 634 - Data Mining  
CS 643 - Cloud Computing  
CS 660 - Digital Watermarking  
CS 673 - Software Design and Production Methodology  
CS 680 - Linux Kernel Programming
CS 708 - Advanced Data Security and Privacy
CS 755 / ECE 782 - Security and Privacy in Wireless Networks
IS 680 - Information Systems Auditing
IS 681 - Computer Security Auditing
IS 682 - Forensic Auditing for Computing Security
IS 687 - Transaction Mining / Fraud Detection
IT 620 - Wireless Network Security & Administration
IT 640 - Network Services Administration
ECE 636 – Computer Networking Laboratory
MGMT 688 - Information Technology, Business, and the Law
MGMT 691 - Legal and Ethical Issues

**Foundational Courses**

CS 610 - Data Structures and Algorithms
CS 630 - Operating System Design
CS 631 - Data Management System Design