

MS in Cyber Security and Privacy – Cyber Defense Option

Degree Program Requirements and Courses

- 36 credits are required.
- All Cybersecurity Core courses are required.
- 6 credits are required from the PTC (Professional and Technical Communications) list
- 6 credits are required from the Management list
- 6 credits are from the Cybersecurity Elective list
- An elective course can be replaced with an MS project course

If a student chooses to work on an MS project, the project must be related to cybersecurity. Furthermore, team-oriented MS projects designed in collaboration with employers are encouraged.

Each MS CSP – Cyber Defense Option student, who is not working full-time, is required to either participate in an internship (normally in the summer) or register for an MS project before graduation.

Core Course Requirements		Credits
CS 608	Cryptography and Security	3
CS 645	Security and Privacy in Computer Systems	3
CS 646	Network Protocols Security	3
CS 647	Counter Hacking Techniques	3
CS 656 / ECE 637	Internet and Higher-Layer Protocols	3
CS 696 / ECE 638	Network Management and Security	3

PTC (Professional and Technical Communications) Courses

PTC 601	Advanced Professional and Technical Communication	3
PTC 624	Professional and Technical Editing	3
PTC 628	Analyzing Social Networks	3
PTC 632	Content Management and Information Architecture	3
PTC 620	Proposal Writing	3
PTC 622	Working in Team: Collaborative and Interpersonal Communications	3
PTC 629	Theory and Practice of Social Media	3

Management Courses

MGMT 641	Global Project Management	3
MGMT 650	Knowledge Management	3
EM 636	Project Management	3
MGMT 682	Business Research Methods	3
MGMT 688	Legal and Ethical Issues	3
MGMT 691	Network Management and Security	3
FIN 600	Corporate Finance I	3
ACCT 615	Management Accounting	3

Cybersecurity Elective Courses

CS 610	Data Structures and Algorithms	3
CS 630	Operating System Design	3
CS 631	Data Management System Design	3
CS 632	Advanced Database Systems	3
CS 634	Data Mining	3
CS 643	Cloud Computing	3
CS 660	Digital Watermarking	3
CS 673	Software Design and Production Methodology	3
CS 680	Linux Kernel Programming	3
CS 708	Advanced Data Security and Privacy	3
CS 755/ECE 782	Security and Privacy in Wireless Networks	3
IS 680	Information Systems Auditing	3
IS 681	Computer Security Auditing	3
IS 682	Forensic Auditing for Computing Security	3
IT 620	Wireless Network Security & Administration	3
IT 640	Network Services Administration	3
ECE 636	Computer Networking Laboratory	3

Project

CS 700B	Master's Project	3
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