

# Master of Science Degree Cybersecurity Program Guide

## Program Information

The Master of Science in Cybersecurity will prepare students with the knowledge and skills needed to understand key issues along with present and emerging cyber threats to information systems, develop graduates with a sufficiently broad and strong technical foundation to understand and analyze cybersecurity vulnerabilities and protections, and prepare students for specialized cybersecurity careers.

Rowan University undergraduates majoring in the Bachelor of Arts in Computing and Informatics program may apply to the Advanced Dual Degree (4+1) program which allows them to earn both the Bachelor of Arts and Master of Science degrees in five years instead of six.

## Program Requirements

The M.S. in Cybersecurity is a 30 credit-hour program. All students must complete 6 credits of foundation courses (2 courses) and 9 credits of core courses (3 courses). Students may complete this degree within 1 ½ to 2 years of study.

### Foundation Courses – 6 s.h.

Course #	Course Name	Notes	Sem/Yr	Grade	Credits
CS 01501	Essentials of Computer Science I				3
CS 01502	Essentials of Computer Science II				3
<b>Subtotal: 6 s.h.</b>					

### Required Core Courses – 9 s.h.

Course #	Course Name	Notes	Sem/Yr	Grade	Credits
CS 03500	Foundations of Cybersecurity				3
CS 03506	Cybersecurity Management, Policy, and Risk				3
CS 03570	Cyber Defense of Operating Systems and Networks				3
<b>Subtotal: 9 s.h.</b>					

### Business Skills for IT Professionals – 6 s.h.

*Students will be required to take one 3-credit course in strategic writing:*

Course #	Course Name	Notes	Sem/Yr	Grade	Credits
MAPR 01547	Graduate Strategic Writing				3

*Students must complete one elective course from the list below:*

Course #	Course Name	Notes	Sem/Yr	Grade	Credits
MAPR 01561	Graduate Strategic Writing II				3
MGT 06521	Leadership Theory and Practice				3
MGT 07600	Predictive Analysis				3
MIS 02530	Information Security for Managers				3
DPEM 00652	Continuity of Operations				3
<b>Subtotal: 6 s.h.</b>					

## Electives – 9 s.h.

Students must complete three elective courses from the list below:

Course #	Course Name	Notes	Sem/Yr	Grade	Credits
CS 03551	Advanced Cybersecurity Principles and Applications				3
CS 03580	Cloud Computing & the Internet of Things-Architectures and Security				3
CS 03695	Advanced Topics in Cybersecurity				3
CS 07652	Cryptographic Algorithms				3
CS 09510	Computer Networks				3
CS 09605	Wireless Network and Systems				3
CS 09612	Network Security				3
CS 09675	Advanced TCP/IP and Internet Protocols And Technologies				3
DPEM 00531	Cybersecurity Risk Analysis in Homeland Security				3
DPEM 00651	Foundations of Global Threats, Risks, and Response				3
DPEM 00652	Continuity of Operations				3
DPEM 00655	Threat Assessment in Homeland Security				3
CJ 09515	Law and Society				3
MIS 02530	Information Security for Managers				3
<b>Subtotal: 9 s.h.</b>					

Any graduate course taken outside of Rowan-CS must be **approved** prior to registration by the Cybersecurity Graduate Program Committee. Such an approval is on an individual basis. The interested student must submit in writing to the Cybersecurity Graduate Program Coordinator an explanation as to why they are interested in the course and how the course addresses one or more of the goals of the MS in Cybersecurity program. The student can expect a response from the Graduate Committee within 10 business days.

### **Minimum Required Grades and Cumulative GPA**

*The Master of Science in Cybersecurity is a Category 3 program.*

*For details regarding satisfactory academic progress and graduation requirements, please visit [www.rowanu.com/policies](http://www.rowanu.com/policies).*