### M.S. IN COMPUTER SCIENCE – CYBERSECURITY CONCENTRATION

## **Tentative Schedule: Cohort 2024**

All courses are offered asynchronously over the Internet. The schedule follows JMU's calendar for fall and spring semesters. Course schedules and course offerings are subject to change with advance notice to students. For an up-to-date schedule please see JMU's <u>academic calendar</u>.

This program is cohort-based. Students who fall behind in their cohort will be moved to the following cohort and are required to satisfy the new cohort requirements.

### **Preparatory Courses**

The following four courses provide a strong foundation for the InfoSec Master's program and students are encouraged to take the courses as refreshers. For course descriptions, see the <u>Graduate School catalog</u>. CS510 and CS511 are taught every summer, and CS512 and CS515 are taught every fall.

Students making less than a "B" in any preparatory course will be dismissed from the program.

#### **Summer 2024**

May 20 – Aug 9 CS510 Object Oriented Programming

May 27 – July 20 CS511 Computer Organization

### **Fall 2024**

Aug 21 CS512 Data Structures

CS515 Discrete Mathematics

#### **Core Courses**

Spring 2025	
Starts Jan 21	CS550 Operating Systems CS559 Computer Security
Summer 2025	
June 2 – July 25	CS523 Ethics, Law and Policy in Cyberspace
Fall 2025	
Starts Aug 20	CS531 Secure Programming CS610 Networks and Network Security
Spring 2026	
Starts Jan 20	CS633 Computer Forensics CS627 Cryptography: Algorithms and Applications
Fall 2026	
Starts Aug 26	CS660 Advanced Network Security AND Non-Thesis Option:

CS685 Special Topics in Information Security

Comprehensive Exam

Thesis Option:

CS700 Thesis (thesis approval and research)

Spring 2027

Starts Jan 19 CS635 Secure Operations AND

Non-Thesis Option:

CS685 Special Topics in Information Security

Thesis Option:

CS700 Thesis (thesis defense by mid-April)

### **Thesis Option:**

Students who are interested in the thesis option should contact the faculty member whom they want to work with, preferably by the end of their second spring semester in the program. So, they can start working on their thesis over the summer. They register for the Thesis in the fall and spring semester of their graduation academic year.

The thesis will replace the two Special Topics courses, scheduled in the last two semesters in the program. Thesis defense counts as their Comprehensive Exam.

# **Non-Thesis Option:**

Students who don't use the thesis option will have to take a Comprehensive Exam, including Operating Systems, Network Security, Cryptography, and Forensics. Students are encouraged to take the exam during the fall semester of their last year in the program. Students who fail the exam will have a second chance to take it during the following spring semester. Students who fail the exam for the second time will be dismissed from the program.