M.S. IN COMPUTER SCIENCE – CYBERSECURITY CONCENTRATION

TENTATIVE SCHEDULE: COHORT 2021

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. These courses do not count toward the hours required for the Master's degree. 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. <u>For course descriptions, see</u> the Graduate School catalog.

SUMMER 2021

FALL 2021

May 17 – Aug 6 CS510 Object-Oriented Programming June 14 – Aug 6 CS511 Computer Organization

Aug 25 CS512 Data Structures
CS515 Foundations of Computer Science

CORE COURSES

CS550 Operating Systems
CS559 Computer Security
CS523 Ethics, Law and Policy in Cyberspace
CS531 Secure Programming
CS610 Networks and Network Security
CS633 Computer Forensics
CS627 Cryptography: Algorithms and Applications
CS660 Advanced Network Security AND
Non-Thesis Option: CS685 Special Topics in Information Security Comprehensive Exam
Thesis Option: CS700 Thesis (thesis approval and research)
CS635 Secure Operations AND
Non-Thesis Option: CS685 Special Topics in Information Security (non-thesis students)
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.