

# M.S. IN COMPUTER SCIENCE CYBERSECURITY THESIS TRACK (CSIS.TT.MS)

Code	Title	Credits
<b>Foundation Requirements (12 credits) <sup>1</sup></b>		
CS-501B	Program Development	3
CS-502	Theoretical Foundations of Computer Science	3
CS-503	Data Structures and Algorithms	3
CS-505	Operating Systems Concepts	3
<b>Program Requirements (30 credits)</b>		
CS-512	Algorithm Design	3
CS-514	Networks	3
CS-517	Database Design and Management	3
CS-518	Fundamentals of Computer Security and Cryptography	3
CS-520	Introduction to Intelligent Systems	3
CS-611	Secure Web Services Design	3
Select 6 credits designated with Course*Type CISEL		6
CS-691	Computer Science Thesis I	3
CS-692	Computer Science Thesis II	3
Total Credits		42

<sup>1</sup> Up to 12 credits may be waived upon evaluation or prior academic preparation.

## Admission Requirements

1. Possession of a baccalaureate degree with a minimum 2.75 overall GPA and a 3.0 in the undergraduate major, preferably in the sciences or engineering.
2. Two letters of recommendation.
3. Two semesters of Calculus (I and II) with grades of "C" or better.
4. Two semesters of computer programming courses within the past five years (equivalent to Monmouth's CS-175 Introduction to Computer Science I (3 cr.), CS-175L Introduction to Computer Science I lab (1 cr.) and CS-176 Introduction to Computer Science II (3 cr.), CS-176L Introduction to Computer Science II Lab (1 cr.)) at a recognized institution with a grade of "B" or better. Applicants not meeting these requirements for programming experience may be required to take CS-501A Computer Programming Essentials (3 cr.) or its equivalent.