

M.S. DEGREE

How to Plan Your Program of Study

PREREQUISITES

- Computer Organization
- Operating Systems Internals & Design
- 2 semesters Programming
- Data Structures & Algorithms

1. Complete all assigned prerequisite courses
2. Complete the core courses for your Major
3. Choose a focus area and take courses within that area.
4. Make sure the courses satisfy the graduation requirement of your program

CHOOSE YOUR MAJOR

Masters of Science Computer Science

CS 7200

AND

CS 7100 OR CS 7140 OR CEG 7370

Thesis Option:

- Maximum 9 hours of thesis
- Minimum 16 hours of CS courses, including the core courses*
- Minimum 6 hours of 7000-level formal courses in addition to the core*
- Maximum 3 hours of independent study

Non-thesis Option:

- Minimum 16 hours of CS courses, including the core courses
- Minimum 12 hours of 7000-level formal courses in addition to the core
- Maximum 3 hours of independent study

* NO MORE THAN 12 CREDITS OF CEG CLASSES

* NO MORE THAN 12 CREDITS AT 6000 LEVEL

Masters of Science Computer Engineering

CEG 7360

AND

CS 7100 OR CS 7140 OR CEG 7370

Thesis Option:

- Maximum 9 hours of thesis
- Minimum 16 hours of CEG courses, including the core courses*
- Minimum 6 hours of 7000-level formal courses in addition to the core*
- Maximum 3 hours of independent study

Non-thesis Option:

- Minimum 16 hours of CEG courses, including the core courses
- Minimum 12 hours of 7000-level formal courses in addition to the core
- Maximum 3 hours of independent study

* NO MORE THAN 12 CREDITS OF CS CLASSES

* NO MORE THAN 12 CREDITS AT 6000 LEVEL

M.S. DEGREE

How to Plan Your Program of Study

CHOOSE YOUR MAJOR

Masters of Science Cyber Security

Prerequisites

- Computer Organization
- Operating Systems Internals & Design
- 2 semesters Programming
- Data Structures & Algorithms

Core Courses

- CEG 6430 Cyber Network Security
- CEG 6420 Host Computer Security
- CEG 6424 Security Attacks & Defenses
- CEG 6750 Information Security

Domain Areas:

- 1) Information and privacy protection
- 2) Systems and network security
- 3) Cyber physical systems
- 4) Secure pervasive computing
- 5) Surveillance and detection systems
- 6) Trustworthy platforms.

Project Option:

- Twelve (12) credit hours of advanced coursework within the six domain areas
- Six (6) credit hours security project

Thesis Option

- Nine (9) credit hours of advanced coursework within the six domain areas
- Nine (9) credit hours of thesis

Cyberdefense Concentration

Core Courses above and

- CEG 6422 - Secure Computing Practices
- CEG 6426 - Legal Aspects of Cybersecurity
- 1 elective course
- 9 credit hours of thesis

Masters of Science Data Science

Prerequisites

- Computer Programming
- 1 semester Statistics
- Linear Algebra

Core Courses

- CS 6840 Intro Machine Learning
- CS 6700 Database Management Systems
- CEG 7560 Visualization & Image Processing for Cyber Security
- DS 7730 Fundamentals of Data Science
- STT 6660 Statistical Methods I

Program Electives (5-8 credit hours)

CEG 6360	CS 6850	STT 6110
CEG 7370	CS 7200	STT 6210
CEG 7380	CS 7700	STT 6610
CS 6270	CS 7720	STT 6620
CS 6280	CS 7800	STT 6670
CS 6370	CS 7810	STT 7020
CS 6710	CS 7830	STT 7440
		STT 7670

Project Option:

- Six (6) credit hours of Data Science project
- Eight (8) credit hours of program electives

Thesis Option:

- Nine (9) credit hours of thesis
- Six (6) credit hours of program electives