COMPUTER SCIENCE, MASTER OF SCIENCE (M.S.)

General Information

The Department of Computer Science and Information Technology offers the Master of Science degree in Computer Science with concentrations in Artificial Intelligence in Data Science, Cyber Security and Digital Forensics, and Game Design.

Program Objectives

The objectives of the Master of Science in Computer Science program are:

1. To provide an advanced degree accessible to computing professionals.
2. To improve the technical skills of computing professionals.
3. To improve the business skills of computing professionals, especially those in contracting positions.
4. To teach the analysis and design skills needed to make wise technical choices.
5. To provide in-depth studies in specific areas of computing.
6. To provide capable computing consultants.
7. To provide teachers for community colleges and technical schools.
8. To teach legal, social, and ethical issues related to computer professionals. The legal issues include obligations and liabilities.

Admission Requirements

To be eligible for a clear admission to graduate standing applicants must have

1. a baccalaureate degree from an accredited institution with minimum grade point average (GPA) of 2.5 overall, or 3.0 on the last 60 semester hours of the baccalaureate program.
2. one of the following:
   a. satisfactory scores on GRE or GMAT. The expected satisfactory score is 149 or higher on Quantitative portion of the GRE or 37 points or higher on the Quantitative portion of the GMAT.
   b. A bachelor's, master's or PhD degree in Science, Technology, Engineering or Math with a GPA of at least 3.0.
   c. an undergraduate precalculus course or equivalent mathematic background.

Program Requirements

CIP Code: 11.0701

Students must complete 33-36 graduate hours in the program as outlined below, including 15 credit hours from 800-level courses and at least 15 credit hours from CSC courses.

Curriculum for the Computer Science Program

Code	Title	Hours
Core Courses		
CSC 730	Programming and Data Structure	3
CSC 815	Computer Admin and Security	3
CSC 825	Network Applic and Security	3
CSC 831	Databases and Algorithms	3
CSC 834	Software Engineering	3
Concentrations		
Students must select one of the following Concentrations:		12
Artificial Intelligence in Data Science		
Cyber Security and Digital Forensics		
Game Design		
Electives		
Choose from six hours of the following:		6
CSC 835	Project Management	
CSC 839	Co-op or Appl Lrn: Comp Scienc	
CSC 890	Independent Study in _____	
Total Hours		**33**

[1] Students who have completed equivalent programming course(s) do not need to take this course. These course equivalencies will be evaluated by the department when the students are admitted into the program.

Artificial Intelligence in Data Science Concentration

Code	Title	Hours
Concentration Courses		
CSC 746	Artificial Intelligence	3
CSC 781	Machine Learning	3
CSC 782	Big Data	3
CSC 783	Data Visualization	3
Total Hours		**12**

Cyber Security and Digital Forensics Concentration

Code	Title	Hours
Concentration Courses		
CSC 736	Incident Response I	3
CSC 737	Incident Response II	3
CSC 744	Database Admin and Security	3
INF 718	Principles of Cybersecurity	3
Total Hours		**12**

Game Design Concentration

Code	Title	Hours
Concentration Courses		
INF 711	Princ of Game Des and Gam Theo	3
INF 712	Game Production and Publicatio	3
INF 713	Online Game and App Design	3
INF 715	Special Topics in Gaming:_____	3
Total Hours		**12**