Computer Science, M.S.

The Department of Computer Science offers several graduate programs that provide instruction on a variety of modern topics in data analytics, software engineering, parallel and distributed computing, and cybersecurity giving graduates the edge to be highly competitive in today's IT job market.

With one of the most affordable tuition plans in Florida and state-of-the-art facilities, our Computer Science Master's program offers cutting edge curricula and learning environments, with professionally-oriented, hands-on study material.

The department annually awards several scholarships, fellowships, and out-of-state tuition waivers to new and returning students. The department also has limited opportunities for teaching/research assistantships for new and returning students. Please see the departmental website for additional information.

Program Requirements

A minimum grade of "C" is required for all courses with an institutional GPA of 3.0 or higher.

Admission Requirements

In addition to the University graduate admission requirements described in the Admissions section of the catalog, the department bases decisions for regular admission on a holistic review of credentials in which the following criteria are used to assess the potential success of each applicant:

- Completion of an undergraduate degree with a minimum institutional GPA of 3.0
- Letter of intent (written by the applicant) to include the applicant's motivation for pursuing an M.S. in Computer Science degree, the extent of related work experience in the field, and future goals related to the attainment of an M.S. in Computer Science degree
- Submission of a resume
- Names and contact information for two references
- Graduate Record Examination (GRE) is optional but highly recommended for international students seeking admission to the campus program

Students entering the program with a Bachelor's degree other than Computer Science may be required to complete prerequisite courses in computing and programming. The department offers the following foundational courses to complete the prerequisite coursework:

- COP 5518 Foundations: Computing Essentials
- COP 5007 Foundations: Programming Essentials
- COP 5417 Foundations: Data Structure & Algorithms Essentials

Computer Science

The Computer Science program offers a flexible and innovative curriculum that blends theoretic foundations of computer science with state-of-the-art computing technologies. Students starting this program typically have an undergraduate degree in Computer Science but may come from another scientific discipline. The program provides students with knowledge and skills in algorithmic programming, software development, and research of computational methods for creating innovative solutions. This program offers two concentration areas in software engineering and data science. However, other concentrations may be chosen with the approval of a faculty advisor.

The program prepares students for doctoral studies and careers in software engineering, data analytics, and other computing fields.

The program can be completed face-to-face or fully online. All courses are offered using a video-conferencing tool for online students to join live lectures and participate in live interactions between the instructor and the students. Online students are strongly encouraged to attend live lectures synchronously via the video-conferencing tool.

Concentrations are informal designations used by graduate programs to indicate areas of emphasis and research, but have no formal significance. They do not appear on the student transcript or diploma.

All courses must be completed with a grade of "C" or better.

COP 5725	Database Systems	3
COP 5522	Parallel and Distributed Programming	3
COP 6416	Advanced Algorithms	3
Choose a concentration:		6
Software Engineering:		
CEN 6030	Agile Software Engineering	
CEN 6017	Continuous Software Engineering	
Data Analytics focus:		
CAP 6771	Data Mining	
CAP 6789	Advanced Big Data Analytics	
Advisor approved concentration		
Electives		9
CAP 5600	Introduction to Artificial Intelligence	
CAP 6579	Advanced Data Mining	
CEN 6064	Software Design	
CIS 6415	Advanced Computer Systems and Networks	
COP 6025	Advanced Programming Languages	
COP 6727	Advanced Database Systems	
5000/6000-level advisor-approved elective		
Choose one of the following:		6
CIS 6971	Thesis	
COT 6931	Computer Science Project (normally 3 sh in two consecutive semesters)	
Total Hours		**30**