

COMPUTER SCIENCE (M.S.)

Requirements

Background courses

Students with insufficient background for graduate-level computer science courses may need to take background coursework. Credits do not apply toward the M.S. program. Students entering the program without an undergraduate degree in computer science may need to take one or more of the following, depending on their background:

Course	Title	Credits
CISC 5002	Discrete Structures	3
CISC 5004	Computer Programming C++	3
CISC 5006	Data Structures	3
CISC 5008	Computer Organization	3

Degree Requirements

The master's degree requires 30 credits of coursework beyond the bachelor's degree, which includes 24 credits of coursework and six credits of a culminating project. It can be completed by a full-time student in three or four semesters.

A "B" average (3.000) must be maintained in courses taken for the master's degree.

Course	Title	Credits
Foundation Courses		
CISC 5825 or CISC 6890	Computer Algorithms ¹ Advanced Computer Algorithms	3
CISC 5200	Computer Language Theory ²	3
	One Software thematic cluster course ³	3
	One Software or Networks and Systems thematic cluster course ³	3
CISC 5325	Database (or one Networks and Systems thematic cluster course) ^{3,4}	3
CISC 5595	Operating Systems (or one Networks and Systems thematic cluster course) ^{3,5}	3
Electives		
	Two courses from any of the five thematic clusters: ³	6
	Software	
	Networks and Systems	
	Artificial Intelligence	
	Data Analytics	
	Cybersecurity	
Capstone or Thesis (one of the below options)		6
<i>Thesis Paper & Research</i>		
CISC 6098	M.S. Computer Science Thesis I	
CISC 6099	M.S. Computer Science Thesis II	
<i>Elective Course and Capstone</i>		
	One additional elective course from any of the five thematic clusters ³	
CISC 6597	Capstone Project in Computer Science	
Total Credits		30

¹ Students who have not taken an undergraduate or graduate-level algorithms course should take CISC 5825 Computer Algorithms. Other students can take CISC 6890 Advanced Computer Algorithms, or (with permission of the program director) substitute another Software Thematic Cluster course.

² Students who have taken an undergraduate course similar to CISC 5200 Computer Language Theory may substitute any Software Thematic Cluster course, with the permission of the program director.

³ A list of courses for each thematic cluster can be found on the Thematic Clusters page (p.).

⁴ Students who have not taken an equivalent undergraduate or graduate course should take CISC 5325 Database.

⁵ Students who have not taken an equivalent undergraduate or graduate course should take CISC 5595 Operating Systems.

CIP Code

11.0101 - Computer and Information Sciences, General.

You can use the CIP code to learn more about career paths associated with this field of study and, for international students, possible post-graduation visa extensions. Learn more about CIP codes and other information resources.