

APPLIED COMPUTER SCIENCE

Master of Science (MS) Face to Face and Online Delivery

This is a guide based on the 2023-2024 Graduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on factors such as dual enrollment, remediation, and summer enrollment. Students meet with an academic advisor each semester and use Degree Works to monitor their progress.

CURRICULUM CHECKLIST

30 Hours Required

Core Requirements:

- CY501 Introduction to Cybersecurity (3)
- CS506 Distributed Cloud Computing (3)
- CS591 Advanced Artificial Intelligence (3)
- CS605 Research Methods (3)
- CS609 Advanced Programming Languages (3)
- CS630 Current Topics in Human Computer Interaction (3)

Choose one thesis option:

Thesis option - 12 hours

- CS/CY5xx-6xx – choose 6 hours*
- CS697 Thesis Research I (3)
- CS698 Thesis Research II (3)
- GR699 Master's Oral Examination (0)

Non Thesis option - 12 hours

- CS/CY5xx-6xx – choose 12 hours*
- CS690 Graduate Project (0)
- GR698 Master's Final Comprehensive Examination (0)

Electives may be chosen from the following with the advice of advisor:*

- CS505 Data Mining (3)
- CS533 Mobile Computing (3)
- CS560 Computer Architecture (3)
- CS575 Advanced Web Development (3)
- CS580 Advanced Robotics (3)
- CS581 Advanced Network Programming (3)
- CS585 Formal Systems & Modeling (3)
- CS603 Introduction to Data Analytics (3)
- CS612 Simulation & Modeling for Computing (3)
- CS631 Advanced Software Engineering (3)
- CS632 Emerging & Converging Technologies & Computing (3)
- CS633 Digital Signal & Image Processing (3)
- CS634 Machine Learning (3)
- CS640 Advanced Database Systems (3)
- CS645 Internet of Things (3)
- CS650 Theory of Computation (3)
- CS653 Special Topics (3)
- CS693 Independent Study (3)
- CS699 Internship (3)
- CY510 Information Security & Assurance (3)
- CY520 Information Security in Systems Administration (3)
- CY610 Web Application Security (3)
- CY620 Computer Forensics (3)
- XX5xx/6xx Any relevant course from other departments and listed as electives – up to 6 hours

Admission Requirements

In addition to the criteria established for general admission to graduate studies, applicants must have the following:

1. A bachelor's degree in computer science, computer information systems or related field
*Students with bachelor's degrees from other fields will be required to take up to 2 prerequisites related to Fundamentals of Computing and Programming (provisional admission).
2. An undergraduate GPA of 3.0 on a 4.0 scale
3. Six completed hours of science and six completed hours of mathematics in the undergraduate degree

Probationary Admission

Applicants who do not meet the general and/or program's admission requirements may be considered for probationary admission upon approval by the graduate program coordinator. Students admitted on probation must complete nine credit hours that count towards the degree with a grade of "B" or better to continue in the program.

Revised 6/22/2023

2023-2024 *degree map*

