

Recommended Computer Science Core Curriculum (MS) for Information Assurance and Cyber Security Career Focus

Required Courses (14 units):

CS 525 Advanced Computer Architecture
CS 530 Advanced Algorithm Design and Analysis
CS 580 Advanced Software Engineering
CS 664 Graduate Seminar

Elective Courses (28 or 24 units):

Select 28 units (with Master's Degree Project) or 24 units (with Master's Degree Thesis) from the following list of courses or other courses approved by the Computer Science Graduate Committee:

(All from the following list are required for the career focus)

CS 599/Husain Advanced Information Security
CS 599/Chen Game Theory
CS 585 Software Verification and Validation
CS 565 Advanced Computer Networks
CS 566 Distributed Computing Systems

(1 or 2 courses from the following list)

CS 517 Natural Language Processing
CS 521 Robotics
CS 570 Human Computer Interaction
CS 575 Topics in Database Systems
CS 599/Manna Information Retrieval
CS 599/Manna Machine Learning

Required Project or Thesis (3 or 7 units):

(Focused on Information Assurance and Cyber Security topics)

CS 691 Directed Study (1 unit) and
CS 695 Master's Degree Project (2 units)

or

CS 691 Directed Study (3 units) and
CS 696 Master's Degree Thesis (4 units)