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)