

ARTIFICIAL INTELLIGENCE ENGINEERING CONCENTRATION, CYBERSECURITY (MS)

Introductory Courses

Introductory courses may be waived for any of the following conditions:

- The student has the appropriate course work to satisfy an Introductory Course.
- The student has appropriate and verified professional experience to satisfy an Introductory Course.
- If an exam is available, the student passes a Graduate Assessment Examination (GAE) in the Introductory Course area.

Course	Title	Quarter Hours
CSC 400	DISCRETE STRUCTURES FOR COMPUTER SCIENCE	4
CSC 401	INTRODUCTION TO PROGRAMMING	4
CSC 402	DATA STRUCTURES I	4
CSC 403	DATA STRUCTURES II	4
CSC 412	TOOLS AND TECHNIQUES FOR COMPUTATIONAL ANALYSIS	4
IT 403	STATISTICS AND DATA ANALYSIS	4

Foundation Courses

Students must complete the following courses:

Course	Title	Quarter Hours
CSC 421	APPLIED ALGORITHMS AND STRUCTURES	4
CSC 480	ARTIFICIAL INTELLIGENCE I	4
CSC 578	NEURAL NETWORKS AND DEEP LEARNING	4
CSEC 440	INFORMATION SECURITY MANAGEMENT (FORMERLY CNS 440)	4
CSEC 454	APPLIED MACHINE LEARNING FOR CYBERSECURITY	4
CSEC 477	GOVERNANCE POLICIES IN INFORMATION ASSURANCE (FORMERLY CNS 477)	4
CSEC 533	ENTERPRISE SECURITY INFRASTRUCTURE CONTROLS AND REGULATORY COMPLIANCE (FORMERLY CNS 533)	4
DSC 540	ADVANCED MACHINE LEARNING	4
CSEC 428	IT RISK MANAGEMENT	4
or CSEC 445	HUMAN-CENTERED CYBERSECURITY (FORMERLY CNS 445)	
or CSEC 448	ONLINE MISINFORMATION AND DISINFORMATION OPERATIONS	
Select two (2) courses below:		8
CSEC 428	IT RISK MANAGEMENT	
CSEC 445	HUMAN-CENTERED CYBERSECURITY (FORMERLY CNS 445)	

CSEC 448	ONLINE MISINFORMATION AND DISINFORMATION OPERATIONS
CSEC 456	APPLIED SOCIAL ENGINEERING
CSEC 466	CRITICAL INFRASTRUCTURE AND CONTROL SYSTEMS CYBERSECURITY (FORMERLY CNS 466)
DSC 430	PYTHON PROGRAMMING
DSC 441	FUNDAMENTALS OF DATA SCIENCE
DSC 450	DATABASE PROCESSING FOR LARGE-SCALE ANALYTICS
Any CSEC 500-level course	

Capstone

Course	Title	Quarter Hours
CSEC 594	COMPUTER INFORMATION AND NETWORK SECURITY CAPSTONE	4