Master of Science in Artificial Intelligence

Catalog Year: 2024 **Total Degree Credit hours: 30**

This degree is an innovative interdisciplinary program tailored for individuals seeking advanced knowledge in the rapidly evolving domain of artificial intelligence. It will provide students with skill-building opportunities in artificial intelligence research, advanced project development, and industrial internships with an emphasis on experiential learning and problem solving.

Required Courses (12 Credit Hours)

	Prerequisites		
CS 7267: Machine Learning	CS 6045 or MTRE 6100 or admission to program	3	
CS 7375: Artificial Intelligence	CS 6045 or MTRE 6100 or admission to program	3	
CS 7357: Neural Networks and Deep Learning	CS 6045 or admission to program	3	
AI 7000: Ethics in Artificial Intelligence	None	3	

Select one of the following program tracks (18 Credit Hours)

Thesis Track

	Prerequisites		
CS 7999: Thesis (repeated for a total of 6 credits)	Permission of program director	1-3	
CS 7998: Research in Computer Science	Varies by topic	1-3	
Elective Courses (9 credit hours) – see list of AI Electives			

Capstone Track

	Prerequisites		
AI 7993: AI Capstone	CS 7267 and CS 7375	3	
Elective Courses (15 credit hours) – see list of AI Electives			

AI Elective Options

	Prerequisites		
CS 7367: Machine Vision	CS 6045 or MTRE 6100 or admission to program	3	
CS 7347: Natural Language Processing	CS 6041 or admission to program	3	
CS 7075: Artificial Intelligence and Robotics	CS 5020 or admission to program	3	
CS 7050: Data Warehousing and Mining	Prereq: 6070 or admission to program Concurrent: 6045	3	
CS 7265: Big Data Analytics	CS 6045 or admission to program	3	
CS 7545: AI for Security and Privacy	CS 7530 or admission to program	3	

Students may also take up to 6 credit hours of 6000 or 7000 level courses with any prefix when pre-approved by the program director. The course must align with program outcomes by either advancing the student's expertise in artificial intelligence or by deepening their domain-specific knowledge in a way that facilitates the application of AI to that field.