

Master of Science in Artificial Intelligence Program Structure

The Master of Science in Artificial Intelligence is a 31-credit hour program that combines advanced computer science theory with specialized courses in artificial intelligence and machine learning. Students also have the opportunity to explore application areas based on their interests. The program offers two options: a coursework-only (non-thesis) track or a thesis track.

Major Required Courses

Course Number	Course Title	Hours
CSE 8011	Graduate Seminar	1
CSE 6763	Ethical & Legal Issues in Computing	3
Theory Requirement (choose one)		3 Total
CSE 8813	Theory of Computation	
CSE 8843	Complexity of Sequential and Parallel Algorithms	
CSE 8833	Algorithms	
AI/ML Foundations		
CSE 6633	Artificial Intelligence	3
CSE 6693	Introduction to Machine Learning	3
CSE 6683	Machine Learning & Soft Computing	3
CSE 8673	Machine Learning	3

Artificial Intelligence (Thesis Option)

AI/ML Electives (select 6 hours, at least 3 hours must be at the 8000 level)		6 Total
CSE 6653	Cognitive Science	

AI/ML Electives (select 6 hours, at least 3 hours must be at the 8000 level)		6 Total
CSE 6643	AI Robotics	
CSE 6623	Computational Biology	
CSE 6293	AI for Cybersecurity	
CSE 7000	Directed Individual Study	
ECE 8493	Introduction to Neural Networks	
MA 6183	Mathematical Foundations of Machine Learning	
ST 6243	Data Analysis I	
ST 6253	Statistical Learning	
ST 8114	Statistical Methods	
ST 8253	Regression Analysis	
ST 8273	Advanced Regression Analysis	
IE 6683	Machine Learning with Industrial Engineering Applications	
CSE 9000	Research	6

Artificial Intelligence (Non-Thesis Option)

AI/ML Electives (select 6 hours, at least 3 hours must be at the 8000 level)		12 Total
CSE 6653	Cognitive Science	
CSE 6643	AI Robotics	
CSE 6623	Computational Biology	
CSE 6623	Computational Biology	
CSE 6293	AI for Cybersecurity	
CSE 7000	Directed Individual Study	
CSE 8080	Directed Individual Project	

AI/ML Electives (select 6 hours, at least 3 hours must be at the 8000 level)		12 Total
ECE 8493	Introduction to Neural Networks	
ECE 8833	Computational Intelligence	
MA 6183	Mathematical Foundations of Machine Learning	
ST 6243	Data Analysis I	
ST 6253	Statistical Learning	
ST 8114	Statistical Methods	
ST 8253	Regression Analysis	
ST 8273	Advanced Regression Analysis	
IE 6683	Machine Learning with Industrial Engineering Applications	
