

Graduate Certificate in AI and Machine Learning

The recent advancement in AI and Machine Learning has made significant impact in a wide range of research fields and industries. The purpose of the graduate certificate is to prepare students and professionals to understand the foundation and advanced skills in AI and machine learning and to handle the growing demands in applying cutting-edge AI techniques.

Requirements

The 15 credit hours Graduate Certificate will be offered as a stand-alone certificate. Students will need to have a 3.00 GPA to complete the program.

Required (6 credit hours)

CMP_SC 7720	Introduction to Machine Learning and Pattern Recognition	3
or ECE 7720	Introduction to Machine Learning and Pattern Recognition	
CMP_SC 8725	Supervised Learning	3
or ECE 8725	Supervised Learning	

Electives (select three courses from the following)

Foundations of AI		
CMP_SC 7750	Artificial Intelligence I	3
CMP_SC 7770	Introduction to Computational Intelligence	3
or ECE 7870	Introduction to Computational Intelligence	
CMP_SC 8370	Data Mining and Knowledge Discovery	3
CMP_SC 8750	Artificial Intelligence II	3
CMP_SC 8780	Advanced Topics in Computational Intelligence	3
or ECE 8875	Advanced Topics in Computational Intelligence	
Machine Learning		
CMP_SC 8180	Machine Learning Methods for Biomedical Informatics	3
CMP_SC 8735	Unsupervised Learning	3
or ECE 8735	Unsupervised Learning	
CMP_SC 8770	Neural Networks	3
or ECE 8890	Neural Networks	
Robotics		
ECE 7320	Architectural Robotics	4
CMP_SC 7730	Building Intelligent Robots	4
or ECE 7340	Building Intelligent Robots	
Computer Vision		
CMP_SC 7650	Digital Image Processing	3
or ECE 7655	Digital Image Processing	
CMP_SC 8690	Computer Vision	3
Natural Language Processing		
CMP_SC 7740	Interdisciplinary Introduction to Natural Language Processing	3
CMP_SC 8740	Advanced Natural Language Processing	3