

New Program Proposal

Artificial Intelligence, Graduate Certificate

The graduate certificate in Artificial Intelligence is a five-course (15 credit hours) program. It provides skills and training necessary to start and/or advance in the growing areas of AI, with a range of electives to focus more specifically in one's desired direction of study. All students must take two required courses and three electives.

A minimum of four courses must be taken in residence in the Department of Mathematics and Computer Science at UMSL. A minimum of three courses must be at the 5000-level or higher. Courses may be substituted with the permission of the program director.

Required Courses		
CMP SCI 5130	Advanced Data Structures and Algorithms	3
CMP SCI 5300	Artificial Intelligence	3
Elective Courses		9
Choose 3 of the following:		
CMP SCI 5320	Evolutionary Computation	
CMP SCI 5340	Machine Learning	
CMP SCI 5342	Data Mining	
CMP SCI 5370	Biological Data Science	
CMP SCI 5390	Deep Learning	
CMP SCI 5420	Digital Image Processing	
CMP SCI 6320	Advances in Evolutionary Computation	
CMP SCI 6340	Genetic Programming	
Total Hours		15

Sign-offs from other departments affected by this proposal

Department	Contact Person	Phone #	Objections
S005150	Dinesh Mirchandani		No

Rationale Graduate certificate, similar to AI undergraduate certificate, will be used as stand alone or as part of the modified MS program.