## **Artificial Intelligence, Undergraduate Certificate**

The undergraduate certificate in Artificial Intelligence is a six-course five-course (18 15 credit hours) program. It provides skills and training necessary to start or progress in the growing areas of AI, with a range of electives to focus more specifically in one's desired direction of study. A minimum GPA of 2.5 is required for admission.

All students must take two required courses and four electives. A minimum of four three courses must be taken in residence in the Department of Mathematics and Computer Science at from UMSL. Courses may be substituted with the permission of the program director certificate coordinator. For more information, students can contact the department chair or email info@arch.edu.

Required Courses		
CMP SCI 3130	Design and Analysis of Algorithms	3
CMP SCI 4300	Introduction to Artificial Intelligence	3
Electives		Ċ
Choose three of the following courses:		Ç
CMP SCI 4320	Introduction to Evolutionary Computation	
CMP SCI 4340	Introduction to Machine Learning	
CMP SCI 4342	Introduction to Data Mining	
CMP SCI 4370	Introduction to Biological Data Science	
CMP SCI 4390	Introduction to Deep Learning	
CMP SCI 4420	Introduction to Digital Image Processing and Computer Vision	
Total Hours		<del>18</del> 1

## Sign-offs from other departments affected by this proposal

Department Contact Person	Phone #	Objections
---------------------------	---------	------------

S005150 Dinesh Mirichandani No

Rationale Reducing hours required to 15 as determined sufficient