Add Certificate Report

Date Submitted:
09/29/2021

Institution
Maryville University of Saint Louis

Implementation Date:
5/1/2022 12:00:00 AM

CIP Information

CIP Code:
110102

CIP Program Title:
Artificial Intelligence

CIP Description:
A program that focuses on the symbolic inference, representation, and simulation by computers and software of human learning and reasoning processes and capabilities, and the computer modeling of human motor control and motion. Includes instruction in computing theory, cybernetics, human factors, natural language processing, and applicable aspects of engineering, technology, and specific end-use applications.

Institution Program Title:
Advanced Artificial Intelligence Certificate

Certificate Type:
Single Semester (CO)

Total Credit Hours:
12

Options

Parent Program:

-

Options Entered:

Mode of Delivery

Classroom

Online

Selected Site(s):

Maryville University of Saint Louis 650 Maryville University Drive,St. Louis,MO 63141

Contact Information

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Maryville University of St. Louis
Post-Baccalaureate Certificates in Artificial Intelligence

Fundamentals of Artificial Intelligence Certificate (15 credit hours)

To earn the Fundamentals of Artificial Intelligence Certificate, a student must complete the following five courses:

- MATH 509 – Mathematics for Machine Learning
- DSCI 503 – Python
- DSCI 508 – Machine Learning
- COSC 635 – Deep Reinforcement Learning
- COSC 640 – Fundamentals of Artificial Intelligence

Advanced Artificial Intelligence Certificate (12 credit hours)

To earn the Advanced Artificial Intelligence Certificate, a student must complete the Fundamentals of Artificial Intelligence Certificate in addition to the following four courses:

- DSCI 619 – Deep Learning
- Three elective courses selected from the list below.

Course Number	Course Name	Prerequisite	First Offering
DSCI 614	Text Mining	DSCI 614	Already exists
COSC 521	Robotics	DSCI 508	2022 (tentative)
COSC 523	Image Processing	DSCI 503	2022 (tentative)
COSC 641	Advanced Artificial Intelligence	COSC 640	2023 (tentative)
COSC 643	Ethics of Artificial Intelligence	COSC 640	2023 (tentative)
COSC 645	Applications of Artificial Intelligence	COSC 640	2023 (tentative)
SWDV 610	Data Structures	DSCI 503 (tentative)	Already exists

Additional Information:

- Students who complete the Fundamentals of AI and Advanced AI certificates can take an additional 6 credit hours of courses to earn the M.S. in Artificial Intelligence degree.
- A student who has prior experience programming in Python may request to replace the DSCI 503 requirements of the Fundamentals of AI certificate with a course selected from the electives list above. Approval for this request will be at the discretion of the Associate Dean of Mathematics and Computing Sciences or the Director of the Computer Science Program.
- A student who completes two or more post-baccalaureate certificates in Machine Learning, Big Data, or Artificial Intelligence may apply some courses toward the requirements of multiple certificates. However, at least 9 credit hours of coursework leading toward the completion of any certificate must be used solely to meet the requirements of that certificate.
- All course requirements for completion of either certificate must be completed within two years of enrollment into the certificate program.