



Applied Artificial Intelligence C.C.

Career Community: Computer Technology and Networking

Curriculum Code: 1852

Effective: Fall 2025 – Summer 2030

Purpose of the Major

Intended for working professionals in the IT industry who already possess a relevant IT degree or two years of on-the-job experience, this certificate provides students with the training and skills required for applied uses of artificial intelligence (AI) within cloud environments. Students learn core concepts related to data preparation, exploration, and analysis; machine learning, natural language processing, and computer vision; and the technologies required to architect, develop, and update large-scale models in the cloud. This certificate requires experience with topics covered within the Cybersecurity Foundations C.C. (1833). Students lacking sufficient background may be required to complete additional coursework before starting this certificate. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

Milestone

Completion of CITI 120 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in this course is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

Additional Information

This Applied Artificial Intelligence C.C. is intended for students who have completed Cybersecurity Foundations C.C. (1833), Cybersecurity A.A.S. (1832), or another comparable degree. For detailed admissions requirements, contact the Computer Information Technology Program at 517-267-6406 for assistance.

To be awarded the certificate, a student must earn a minimum grade of 2.0 in each course.

Contact Information

Contact the Computer Information Technologies Program in the West Campus Building, Room M103, telephone number 517-267-6406 or Student Services West Campus, West Campus Building, Room M016, telephone number 517-267-5452.

Major Required Courses

Course Code	Course Title	Credit / Billing Hours
CITI 120	Data Analysis with Python	3 / 3
CITI 140	Intro to Machine Learning	3 / 3
CITI 220	Computer Vision	3 / 3
CITO 120	Cloud Architecting with AWS	3 / 3

Course Code	Course Title	Credit/ Billing Hours
CITO 140	Cloud Development Ops with AWS	3 / 3
CITO 240	Machine Learning with AWS	3 / 3

Minimum Total Credit Hours

18 credits /18 billing hours

Recommended Course Sequence

Semester I
CITI 120
CITO 120

Semester II
CITI 140
CITO 140

Semester III
CITI 220
CITO 240

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree titles, and make course changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.