Miami Dade College

Applied Artificial Intelligence
Associate in Science | Code: 25080 | 60 credits
CIP (1511010200**)**
Effective Term: Fall 2024 (2247)

The Associate in Science in Applied Artificial Intelligence introduces learners to the importance of managing the lifecycle of an artificial intelligence (AI) project and ethical considerations relevant to its design and implementation. It offers hands-on learning on the applications of AI and use cases. Students also learn concepts and popular tools such as machine learning, data collection, classification, natural language processing, the functions of AI virtual assistants, and techniques used in AI for computer vision as domains to build AI solutions. The program is geared for those who want to enter or upskill into the field as AI Developers or AI Specialists.

GENERAL EDUCATION REQUIREMENTS (15.00 Credits)
COMMUNICATIONS (3.00 credits)

ENC 1101	English Composition	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).

HUMANITIES (3.00 credits)

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	
THE 2000	Theatre Appreciation	(3 credits)	

MATHEMATICS (3.00 credits)

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033⬧

⬧**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

NATURAL SCIENCE (3.00 credits)

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
GLY 1010	Physical Geology	(3 credits)
OCE 1001	Introduction to Oceanography	(3 credits)
PHY 1020	General Education Physics	(3 credits)

SOCIAL SCIENCE (3.00 credits)

AMH 2010	History of the US to 1877	(3 credits)
AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

COMPUTER COMPETENCY
Test type(s) needed:
Computer Competency Test (CCT)
---OR---
CGS 1060C   Introduction to Computer Technology & Application

MAJOR COURSE REQUIREMENTS (37.00 credits)

CAI 1001C	Artificial Intelligence (AI) Thinking	(3 credits)	
CAI 2100C	Machine Learning Foundations	(3 credits)	Prerequisites: CAI 1001C and COP 1047C
CAI 2300C	Introduction to Natural Language Processing	(3 credits)	Prerequisite: CAI 2100C
CAI 2820C	Artificial Intelligence Application Solutions	(3 credits)	Prerequisites: CAI 2300C and CAI 2840C
CAI 2840C	Introduction to Computer Vision	(3 credits)	Prerequisite: CAI 2100C
CGS 1060C	Introduction to Computer Technology and Applications	(4 credits)	
CGS 1540C	Database Concepts and Design	(4 credits)	
COP 1047C	Introduction to Python Programming	(4 credits)	
CTS 1145	Cloud Essentials	(4 credits)	
PHI 2680	Artificial Intelligence and Ethics	(3 credits)	
STA 2023	Statistical Methods	(3 credits)	Prerequisite: MAT 1033 or MGF 1131

Note: Students must seek advisement for proper mathematics course from discipline chairperson.

PROGRAM ELECTIVES (8.00 credits)

Electives are restricted to courses listed below:

MAC*, MAD*, MAP*

CAP 1788	Introduction to Data Analytics	(4 credits)	
COP 2800	Java Programming	(4 credits)	Prerequisites: COP 1047C, COP 1334, or COP 2270
CTS 1120	Cybersecurity Fundamentals	(4 credits)	
GEB 1432	Applied Artificial Intelligence (AI) in Business	(3 credits)	
ETS 1603C	Introduction to Robotics	(4 credits)	