

COURSE SEQUENCE GUIDE | FULL-TIME ENROLLMENT Applied Artificial Intelligence Associate in Science | Code: 25080 | 60 credits Effective Term: Fall 2024 (2247)

### Semester 1

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CAI 1001C	Artificial Intelligence (AI) Thinking	3		$\checkmark$	✓
CGS 1060C	Introduction to Computer Technology & Applications	4			
COP 1047C	Introduction to Python Programming	4	Note: Course prepares students for Python Coding Specialist industry certification		~
MAC 1105	College Algebra	3	Prerequisite: MAT 1033 <b>Note:</b> Students must seek advisement for proper mathematics course from discipline chairperson.		
	Semester Credits	14			

# Semester 2

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CAI 2100C	Machine Learning Foundations	3	Prerequisite: CAI 1001C Recommended: Completion of COP 1047C		~
ENC 1101	English Composition 1	3	Prerequisite: Student must meet the Developmental Education reading & writing requirements in State Rule 6A- 10.0315 (by course, placement score, or eligible exemption).		
PHI 2680	Artificial Intelligence and Ethics	3		✓	✓
STA 2023	Statistical Methods	3	Prerequisite: MAT 1033 or MGF 1131		
	Semester Credits	12			

## Semester 3

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
Social Science	AMH 2010, AMH 2020, POS 2041	3	<b>Note:</b> Students must satisfy civic literacy requirement by successfully completing AMH 2010, AMH 2020 or POS 2041, which are course options for General Education - Social Sciences. Students are additionally required to achieve a passing score on an approved assessment. Please see Testing Department for examinations and exemptions.		
CGS 1540C	Database Concepts and Design	4			
	Semester Credits	7			

# Semester 4

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CAI 2300C	Introduction to Natural Language	3	Prereguisite: CAI 2100C		✓
CAI 2500C	Processing	5			
CAI 2840C	Introduction to Computer Vision	3	Prerequisite: CAI 2100C		$\checkmark$
CTS 1145		4	Note: Course prepares students for AWS		
C13 1145	Cloud Essentials	4	Certified Cloud Practitioner industry		

			certification		
Elective	CAP 1788, COP 2800, CTS 1120, GEB 1432, HSC 2060, ETS 1603C, MAC*, MAD*, MAP*	4	<b>Note:</b> Students interested in the BS in Applied Artificial Intelligence are recommended to take COP 2800. See academic advisor for course requisites.	GEB 1432, HSC 2060, ETS 1603C	
	Semester Credits	14			

# Semester 5

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CAI 2820C	Artificial Intelligence Application Solutions	3	Prerequisites: CAI 2300C and CAI 2840C		
Elective	CAP 1788, COP 2800, CTS 1120, GEB 1432, HSC 2060, ETS 1603C, MAC*, MAD*, MAP*	4	<b>Note:</b> Students interested in the BS in Applied Artificial Intelligence are recommended to take COP 2800. See academic advisor for course requisites.	GEB 1432, HSC 2060, ETS 1603C	
Humanities	ARH 1000, HUM 1020, LIT 2000, MUL 1010, PHI 2010, THE 2000	3	<b>Note:</b> ENC 1101 is a prerequisite to LIT 2000.		
Natural Science	AST 1002, BSC 1005, CHM 1020, ESC 1000, EVR 1001, GLY 1010, OCE 1001, PHY 1020	3			
	Semester Credits	13			
	Program Total	60		9	18

**Academic Pathway at MDC:** The AS in Applied Artificial Intelligence is a pathway to the BS in Applied Artificial Intelligence (Plan Code S9520). Program courses lead to a College Credit Certificate (CCC) in Artificial Intelligence Awareness (Plan Code: 66040) and a CCC in Artificial Intelligence Practitioner (Plan Code: 66041). To learn more about program courses, see the <u>College Catalog</u>. Certain courses will prepare you for in-demand industry certifications and costs of exams may be eligible for reimbursement. You may also accelerate your studies via credit for prior learning or credit for attained industry certifications. Learn more.



COURSE SEQUENCE GUIDE | PART-TIME ENROLLMENT Applied Artificial Intelligence Associate in Science | Code: 25080 | 60 credits Effective Term: Fall 2024 (2247)

## Semester 1

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CGS 1060C	Introduction to Computer Technology & Applications	4			
ENC 1101	English Composition 1	3	Prerequisite: Student must meet the Developmental Education reading & writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).		
MAC 1105	College Algebra	3	Prerequisite: MAT 1033 <b>Note:</b> Students must seek advisement for proper mathematics course from discipline chairperson.		
	Semester Credits	10			

# Semester 2

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CAI 1001C	Artificial Intelligence (AI) Thinking	3		$\checkmark$	~
COP 1047C	Introduction to Python Programming	4	Note: Course prepares students for Python Coding Specialist industry certification		~
PHI 2680	Artificial Intelligence and Ethics	3		$\checkmark$	✓
	Semester Credits	10			

# Semester 3

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
Social Science	AMH 2010, AMH 2020, POS 2041	3	<b>Note:</b> Students must satisfy civic literacy requirement by successfully completing AMH 2010, AMH 2020 or POS 2041, which are course options for General Education - Social Sciences. Students are additionally required to achieve a passing score on an approved assessment. Please see Testing Department for examinations and exemptions.		
STA 2023	Statistical Methods	3	Prerequisite: MAT 1033 or MGF 1131		
	Summer Semester Credits	6			

## Semester 4

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CAI 2100C	Machine Learning Foundations	3	Prerequisite: CAI 1001C Recommended: Completion of COP 1047C		$\checkmark$
CGS 1540C	Database Concepts and Design	4			
Humanities	ARH 1000, HUM 1020, LIT 2000, MUL 1010, PHI 2010, THE 2000	3			
	Semester Credits	10			

## Semester 5

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CAI 2300C	Introduction to Natural Language Processing	3	Prerequisite: CAI 2100C		~
CAI 2840C	Introduction to Computer Vision	3	Prerequisite: CAI 2100C		✓
CTS 1145	Cloud Essentials	4	Note: Course prepares students for <u>AWS</u> <u>Certified Cloud Practitioner</u> industry certification		
	Semester Credits	10			

## Semester 6

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
Elective	CAP 1788, COP 2800, CTS 1120, GEB 1432, HSC 2060, ETS 1603C, MAC*, MAD*, MAP*	4	<b>Note:</b> Students interested in the BS in Applied Artificial Intelligence are recommended to take COP 2800. See academic advisor for course requisites.	GEB 1432, HSC 2060 ETS 1603C	
	Summer Semester Credits	4			

## Semester 7

Course ID	Course Title	Credits	Pre/Co-requisites	CCC-AI Awareness	CCC-AI Practitioner
CAI 2820C	Artificial Intelligence Application Solutions	3	Prerequisites: CAI 2300C and CAI 2840C		
Elective	CAP 1788, COP 2800, CTS 1120, GEB 1432, HSC 2060, ETS 1603C, MAC*, MAD*, MAP*	4	<b>Note:</b> Students interested in the BS in Applied Artificial Intelligence are recommended to take COP 2800. See academic advisor for course requisites.	GEB 1432, HSC 2060 ETS 1603C	
Natural Science	AST 1002, BSC 1005, CHM 1020, ESC 1000, EVR 1001, GLY 1010, OCE 1001, PHY 1020	3			
	Semester Credits	10			
	Program Total	60		9	18

**Academic Pathway at MDC:** The AS in Applied Artificial Intelligence is a pathway to the BS in Applied Artificial Intelligence (Plan Code S9520). Program courses lead to a College Credit Certificate (CCC) in Artificial Intelligence Awareness (Plan Code: 66040) and a CCC in Artificial Intelligence Practitioner (Plan Code: 66041). To learn more about program courses, see the <u>College Catalog</u>. Certain courses will prepare you for in-demand industry certifications and costs of exams may be eligible for reimbursement. You may also accelerate your studies via credit for prior learning or credit for attained industry certifications. Learn more.