

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING, ASSOCIATE IN APPLIED SCIENCE



Associate in Applied Science : AAS 3891

61-76 Credits

Program Contact

Habib Matar | habib.matar@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Artificial Intelligence and Machine Learning focuses on building machine learning models that can be used for predicting, making decisions and enhancing human capabilities. The program prepares students for entry level positions in a variety of fields using artificial intelligence, including the information technology, automotive, healthcare, aerospace, industrial, and manufacturing industries. Program content includes an introduction to artificial intelligence and machine learning, natural language processing, computer vision, and artificial intelligence for business solutions and other applications. The curriculum also includes coursework in computer programming, math, engineering, and statistics.

Program Notes

Students must earn a grade of C or better for all courses required within the program. Overall program minimum GPA = 3.00.

++ indicates any suffixed course may be selected.

Program Requirements

Program Prerequisites: None

Code	Title	Credits	Semester
Required Courses			
AIM100	Introduction to Artificial Intelligence	3	_____
AIM110	Introduction to Machine Learning	3	_____
AIM210	Natural Language Processing	3	_____
AIM220	Artificial Intelligence for Computer Vision	3	_____
AIM230	Artificial Intelligence for Business Solutions	3	_____

AIM240	Artificial Intelligence Capstone Project	3	_____
Select one of the following:		0-3	_____
CIS105	Survey of Computer Information Systems		_____
May be waived by permission of the Program Director			_____
Select one of the following:		3	_____
CIS119DO	Introduction to Oracle: SQL		_____
CIS276DA	MySQL Database		_____
CIS276DB	SQL Server Database		_____
CIS156	Python Programming: Level I	3	_____
ECE102	Engineering Analysis Tools and Techniques	2	_____
ECE103	Engineering Problem Solving and Design	2	_____
FYE101	Introduction to College, Career and Personal Success	1-3	_____
or FYE103	Exploration of College, Career and Personal Success		_____
MAT206	Elements of Statistics	3	_____
MAT225	Elementary Linear Algebra	3	_____
Restricted Electives			_____
Select a programming language from below that best aligns with academic and professional goals (to complete the minimum total program credits required for this degree) in one of the following areas:		0-3	_____
CIS150	Programming Fundamentals		_____
CIS150AB	Object-Oriented Programming Fundamentals		_____
CIS159	Visual Basic Programming I		_____
CIS162++	Any C Programming: Level I course		_____
CIS163AA	Java Programming: Level I		_____

CIS165++	Any Mobile Application Development course	
CSC100++	Introduction to Computer Science (C++)	
CSC110++	Introduction to Computer Science (Java)	
General Education		
Core		
<i>First-Year Composition</i>		
ENG101	First-Year Composition	3
or ENG107	First-Year Composition for ESL	
ENG102	First-Year Composition	3
or ENG108	First-Year Composition for ESL	
<i>Oral Communication</i>		
Select one of the following:		3
COM100	Introduction to Human Communication	
COM110	Interpersonal Communication	
COM225	Public Speaking	
COM230	Small Group Communication	
Any approved General Education course from the Oral Communication area		
<i>Critical Reading</i>		
Complete one of the following:		0-3
CRE101	College Critical Reading and Critical Thinking	
Or equivalent as indicated by assessment		
<i>Mathematics</i>		
Any approved general education course in the Mathematical Applications (MA) area (that serves as a prerequisite for) MAT22+ 0-9		4-14
MAT220	Calculus with Analytic Geometry I	
or MAT221	Calculus with Analytic Geometry I	
Distribution		
<i>Humanities, Arts and Design</i>		
Any approved general education course(s) from the Humanities, Arts and Design area		3
<i>Social and Behavioral Sciences</i>		

Any approved general education course(s) in the Social and Behavioral Sciences area ¹	3
<i>Natural Sciences</i>	
Any approved general education course(s) in the Natural Sciences area	4
Total Credits	61-76

¹ Recommend PSY101 Introduction to Psychology or SOC101 Introduction to Sociology