

ARTIFICIAL INTELLIGENCE, AN OPTION TO THE ASSOCIATE IN APPLIED SCIENCE IN COMPUTER SCIENCE

Program Description

This career program prepares students for entry-level positions in a multitude of Artificial Intelligence careers to be utilized in a variety of industries including the medical, manufacturing, financial, and automotive industries. Artificial Intelligence careers include positions such as Data Analytics Engineer, Data Scientist, Machine Learning Specialist, Big Data Engineer and Software Development Professional. The curriculum has been designed to introduce the student to the study of Artificial Intelligence and expose the student to real-world applications where AI is utilized in the areas of Machine Learning, Computer Vision, Natural Language Processing and Neural Networks. The curriculum also includes courses in programming, math, social sciences and humanities. A graduate of the program will have a firm understanding of Artificial Intelligence, the AI Project Lifecycle, various Machine Learning Algorithms such as Supervised and Unsupervised Learning and the ability to construct a Neural Network and apply it to topics such as vision and language processing.

The department recommends the following minimal criteria for prospective students in the Computer Science/Information Technology program:

1. High school diploma or equivalent
2. Cumulative high school grade point average of C or above
3. Ranked in top half of high school graduating class
4. No developmental studies requirement

Program Requirements

Freshman		
First Semester		Credit Hours
ENGL 151	English I	3.00000
Mathematics/Science/Technology Gen. Ed. Requirement (https://catalog.ocean.edu/graduation-requirements-degree/approved-general-education-courses/#math)		3
CSIT 165	Programming I	4.00000
CSIT 191	Introduction to Artificial Intelligence	3
Humanities or Social Science Gen. Ed. Requirement (https://catalog.ocean.edu/graduation-requirements-degree/approved-general-education-courses/#humanities)		3
Credit Hours		16
Second Semester		
ENGL 152	English II	3.00000
MATH 156	Introduction to Statistics	3.00000
MATH 201	Precalculus Techniques and Applications	4
CSIT 168	Introduction to Python Programming	2.00000
CSIT 213	Database Management	3.00000
Credit Hours		15
Sophomore		
First Semester		
MATH 265	Calculus I	4.00000

CSIT 192	Introduction to Machine Learning	3
Computer Science Elective		3
Any Gen. Ed. Requirement (https://catalog.ocean.edu/graduation-requirements-degree/approved-general-education-courses/#general education)		4
Credit Hours		14
Second Semester		
CSIT 292	Natural Language Processing	3
CSIT 291	Computer Vision	3
CSIT Elective		3
Any Gen. Ed. Requirement (https://catalog.ocean.edu/graduation-requirements-degree/approved-general-education-courses/#general education)		4
Elective (to meet 60 credits)		2
Credit Hours		15
Total Credit Hours		60