

NAVAL ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Overview

Degrees Offered: AAS

Program Begins: Fall, Spring, Summer

Delivery Method: Online

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Description

The Naval Artificial Intelligence and Machine Learning program curriculum focuses on AI (including AI for business solutions and other applications), natural language processing, computer vision, computer programming (Python), machine learning, math, engineering, and statistics. It also spotlights building machine learning models that can predict, make decisions, and enhance human capabilities. The program will include case studies.

Preparation

Students might consider high school courses in algebra, computers, and statistics to assist them in college study. However, these courses are not mandatory for enrollment.

Requirements

This program is currently offered exclusively to students participating in the United States Naval Community College (USNCC) partnership. Additional information about USNCC programs at Bismarck State College can be found on BSC's United States Naval Community College webpage.

Students who are not part of the USNCC program may instead consider the Intelligent Machine Learning program.

Students enrolled in this program must also complete the Naval Studies Certificate, which consists of the following courses offered through the United States Naval Community College (USNCC).

Course	Title	Credits
NAV 101	Naval Ethics and Leadership	3
NAV 102	Modern Naval History	3
NAV 103	Naval Force Design	3
NAV 104	Civilian/Military Relations, Organization and American Government	3
NAV 105	Introduction to the Geopolitical Environment	3

Students who complete the curriculum requirements can earn an Associate in Applied Science degree in Naval Artificial Intelligence and Machine Learning.

Program Certificate Options

The following Program Certificates may be completed independently or alongside the Artificial Intelligence and Machine Learning program:

- Foundations in Emerging Technologies
- Artificial Intelligence and Machine Learning Specialist

Program Pathways

The Naval Artificial Intelligence and Machine Learning program stack into the following BAS degree:

- Intelligent Machine Learning

Career Opportunities

Demand for AI skills is expected to grow exponentially over the coming years and drive a need for workers to learn new technical skills across industries. Career opportunities exist as a machine learning researcher, AI engineer, data mining and analysis, machine learning engineer, business intelligence developer, and computer systems analyst.

Degree Plans

- Naval Artificial Intelligence and Machine Learning Associate in Applied Science

Program Learning Outcomes

Upon graduation, Naval Artificial Intelligence and Machine Learning students will be able to:

- Apply common artificial intelligence (AI) concepts and methodologies, including Neural Networks/Deep Learning, Machine Learning, Natural Language Processing, Computer Vision, and data science, for analysis and decision making.
- Apply artificial intelligence (AI) project development and machine learning life cycle to address social and business issues, opportunities, and problems.
- Use appropriate programming languages to implement artificial intelligence (AI) solutions.
- Communicate in varied settings, orally and visually, and in writing, in a culturally responsive manner.
- Collaborate with diverse individuals and teams to design and implement artificial intelligence and machine learning solutions.