

# ARTIFICIAL INTELLIGENCE

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## Program Description

The Certificate of Achievement in Principles of Machine Learning and Artificial Intelligence provides foundational knowledge in this growing field. This certificate is relevant for students looking to enter the workforce, learn new skills in an existing role, or work toward other certificates and degrees in computer science, artificial intelligence, and machine learning.

Learn more about the program on the [Computer Science website](#).

## Program Learning Outcomes

- Students will be able to use Jupyter notebooks or similar programs to load and preprocess data, train and validate models, and visualize results.
- Students will be able to write programs that traverse complex discrete state spaces to reach a goal or optimize an outcome.
- Students will be able to design adversarial agents that approximate optimal behavior with incomplete environmental information.
- Students will be able to explain the causes of biased outcomes in poorly designed models, as well as how to overcome them.

## Award Type(s)

- CA = Certificate of Achievement

## Units Required

- Certificate(s): 22

## Certificate Requirements

### Certificate of Achievement in Principles of Machine Learning and Artificial Intelligence

- Units: 22

Code	Title	Units
C S 3A	OBJECT-ORIENTED PROGRAMMING METHODOLOGIES IN PYTHON	4.5
C S 8A	INTRODUCTION TO DATA SCIENCE	4.5
C S 11A	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	4.5
C S 12A	INTRODUCTION TO MACHINE LEARNING	4.5
HUMN 15 or PHIL 15	ETHICS IN ARTIFICIAL INTELLIGENCE	4
<b>Total Units</b>		<b>22</b>