

Certificate

Trustworthy Artificial Intelligence Certificate

The purpose of this interdisciplinary certificate is to provide an understanding of trustworthy and responsible Artificial Intelligence (AI) concepts in the context of cybersecurity. The program includes coursework focusing on the basics of machine learning and artificial intelligence, as well as the concepts of trustworthiness and security in the domain of cybersecurity. Students will gain knowledge on the representation and simulation by computers and software of human learning and reasoning processes. Students will be able to describe the essential building blocks of trustworthiness with a focus on reliability, transparency, interpretability, fairness, and ethics. Graduates will be able to describe and understand the concepts necessary for developing AI systems in a responsible and trustworthy manner with a focus on applications related to cybersecurity.

All applicants admitted to the certificate program must meet ODU requirements for graduate admission: an earned baccalaureate degree from a regionally accredited institution or an equivalent degree from a foreign institution.

Non-degree seeking students are required to have these same credentials, though documentation is not required. Ultimately, students must apply to the certificate program in order to obtain the certificate. The courses offered under this program may be taken by current ODU students or new students.

Curriculum Requirements

This certificate requires 12 credits and a 3.0 GPA.

CS 522	Introduction to Machine Learning	3
CYSE 635	AI Security and Privacy	3
Select one of the following:		3
CS 580	Introduction to Artificial Intelligence	3
CS 733	Natural Language Processing	
Select one of the following:		3
CYSE 520	Applied Machine Learning in Cybersecurity	3
CYSE 640	Trustworthy and Responsible AI	
Total Credit Hours		12