

Computer Science - Artificial Intelligence (AI) and Machine Learning (ML)

(CIP 11.0701)

Level II Certificate

The Computer Science - Artificial Intelligence (AI) and Machine Learning (ML) Level II Certificate is designed to prepare students to analyze, design, and develop a computer information system in a real-world scenario. Students conceptualize, design, and diagram possible solutions to logical data-driven problems, apply a variety of information technology concepts and tools to the management of files and large data sets, analyze data using appropriate programming languages and environments for data science, and create reports and visualizations that communicate the findings of complex analyses.

Courses	
Semester I	Hours
ITAI 1370 Artificial Intelligence (AI) History, Theory, and Platforms	3
ITSE 1302 Computer Programming (Python)	3
ITSY 1300 Fundamentals of Information Security	3
ITNW 1309 Fundamentals of Cloud Computing	3
Semester 1 Hours	12
Semester II	
DSAI 1371 Introduction to Data Science and Artificial Intelligence (AI)	3
ITAI 1371 Introduction to Machine Learning (ML)	3
Semester 2 Hours	6
Semester III	
ITAI 2373 Natural Language Processing (NLP)	3
ITSC 1316 Linux Installation and Configuration	3
Semester 3 Hours	6
Semester IV	
DSAI 2375 Advanced Data Science and Analytics (Capstone Course)	3
ITAI 2377 Data Science in Artificial Intelligence (AI)	3
Semester 4 Hours	6
30 Semester Credit Hours	