ARTIFICIAL INTELLIGENCE, CERTIFICATE OF ACHIEVEMENT

Banner Code: 3_CT_AI
Control Number: 45416
Not Financial Aid Eligible

The Certificate of Achievement in Artificial Intelligence offers a foundational understanding of AI principles, tools, and applications. Through a comprehensive curriculum spanning machine learning, data science, neural networks, and AI ethics, students gain the skills to analyze and implement AI models in diverse fields such as healthcare, business, and technology. This program covers programming fundamentals, data processing, model development, and deployment, with a focus on practical, hands-on experience. Students will be prepared for entry-level roles in AI or to transfer to a four-year degree program for further study in AI and data science.

Program Level Student Learning Outcomes

Upon completion of this program, students will be able to:

1. Demonstrate knowledge of core artificial intelligence (AI) principles, including machine learning, data processing, and neural networks, to solve real-world problems across various domains.

2. Use programming skills and tools to design, build, and test basic machine learning and artificial intelligence (AI) models, such as classification and regression models, using popular AI frameworks.

3. Use artificial intelligence (AI) technologies and applications to perform data collection, cleaning, and exploratory data analysis, and effectively communicate findings through data visualization techniques to support AI model development.

4. Identify and discuss ethical issues in artificial intelligence (AI), including privacy, bias, and transparency, and understand the implications of AI applications on society and diverse communities.

Review Graduation Requirements (https://catalog.cccd.edu/coastline/graduation-requirements/certificates/#achievementtext).

Course	Title	Units
Required Courses		
Select one of the following:		
STAT C1000	Introduction to Statistics	4
MATH C140	Business Calculus	4
MATH C150	Finite Mathematics With Applications	4
MATH C180	Calculus 1	5
Complete the following:		
ICS C120	Introduction to Programming	3
ICS C123	Fundamental Data Structures	3
ICS C141	Concepts of Programming Languages	3
CIS C157	Introduction to Python Programming	3
ICS C165	Foundations of Data Science and Artificial Intelligence	3
CIS C240	SQL Database Development	3
CIS C285	Data Governance, Privacy, and Policies	3
ICS C255	Algorithm Design	3
ICS C265	Artificial Intelligence	3
Total Units		**31-32**