APPLIED ARTIFICIAL INTELLIGENCE ASSOCIATE OF SCIENCE DEGREE

The Applied Artificial Intelligence Associate of Science Degree introduces students to the concepts, tools, and techniques that drive modern AI applications. The program provides a strong foundation in computer science while emphasizing hands-on experience with machine learning, natural language processing, data analysis, and automation. Students will learn how AI is applied in fields such as business, healthcare, education, and cybersecurity, and gain practical skills that prepare them for entry-level careers in technology. Graduates of this program will be ready to contribute to projects involving AI development, deployment, and support, with the ability to adapt to emerging technologies in a rapidly evolving industry.

Code	Title	Units
Required Courses:		
CIT 100	Introduction to Personal Computers	3
or CS 110	Fundamentals of Computer Science	
MATH 180	Introduction to Data Science	3-4
or CS 130	Discrete Structures	
CIT 104	Amazon Web Services (AWS) Academy: Introduction to the Cloud	4
CIT 232	Computer Network Fundamentals	3
CIT 215	Database Management Systems	3
CS 102	Introduction to Python Programming	3
or CS 102H	Introduction to Python Programming - Honors	
CS 104	Data Programming with Python	4
CS 160	Introduction to Data Science and Engineering	4
CS 188	Introduction to Artificial Intelligence (AI)	3
CS 189	Introduction to Machine Learning	3
Total Units		**33-34**

To earn an SBVC Associate Degree students must complete one of the following General Education (GE) patterns:

- SBVC General Education and Graduation Requirements (https://www.valleycollege.edu/student-services/counseling/articulation/graduation-requirements-current.php)
- Cal-GETC - California General Education Transfer Curriculum (https://www.valleycollege.edu/student-services/counseling/articulation/calgetc.php)

Program Learning Outcomes

At the completion of this program, students will be able to:

a. Analyze real world problems and apply principles of artificial intelligence, data science, and computing to identify solutions.
b. Develop the technical literacy and critical thinking skills necessary to adapt to emerging AI technologies, assess their risks and benefits, and engage in lifelong learning.
c. Communicate effectively in technical and professional contexts, including writing project documentation, preparing data driven reports, and presenting AI solutions.
d. Collaborate with interested parties to design AI solutions that balance technical feasibility, organizational goals, and social impact.
e. Design, implement, and evaluate AI-based systems and applications that meet organizational and societal needs.
f. Create and evaluate AI strategies that prioritize inclusion, equitable access, and positive community impact, ensuring that intelligent systems serve all populations effectively.