

DTC-SAP-333 Machine Learning and Artificial Intelligence with Python

Total Hours: 60

Target Audience: Beginners

Prerequisites: Introduction to Python Programming

Course Overview

This introductory course provides students with a hands-on foundation in artificial intelligence (AI) and machine learning (ML), offering a practical, beginner-friendly path to understanding and creating their first AI models. Students will explore essential AI and ML concepts, develop skills in Python programming for AI, and gain experience in popular AI domains such as Natural Language Processing (NLP) and Computer Vision.

Module 1: Introduction to Artificial Intelligence

Module 2: Python for AI

Module 3: Search and Problem-Solving in AI

Module 4: Machine Learning Basics

Module 5: Supervised Learning Algorithms

Module 6: Unsupervised Learning Algorithms

Module 7: Introduction to Neural Networks and Deep Learning

Module 8: Natural Language Processing (NLP)

Module 9: Computer Vision

Module 10: Ethics and Social Implications of AI

Module 11: Final Project and Presentations