



Information Technology

Microsoft Certified: Azure Data Scientist Associate

Course Introduction

Microsoft Certified: Azure Data Scientist Associate

The Microsoft Certified: Azure Data Scientist Associate course is designed to equip learners with the essential skills to effectively utilize Azure Machine Learning for data science projects. This course covers the complete lifecycle of a data science project, from data preparation to model deployment and management, enabling participants to build robust machine learning solutions on the Azure platform.

Target Audience

- Data scientists and machine learning practitioners seeking to enhance their skills in Azure.
- IT professionals looking to specialize in data science and machine learning on the Azure platform.

Learning Objectives

- Understand the Azure Machine Learning environment and its components.
- Prepare and transform data for machine learning applications.
- Build, evaluate, and optimize machine learning models using Azure ML.
- Deploy machine learning models as web services and integrate them into applications.
- Manage and govern machine learning models throughout their lifecycle.
- Apply best practices for ethical AI and data science.

Course Outline

- **Day 01**

Introduction to Azure Machine Learning

- Overview of Azure Machine Learning
- Understanding the data science lifecycle
- Setting up an Azure Machine Learning workspace

Data Preparation

- Data ingestion and exploration
- Data cleaning and transformation
- Feature engineering techniques
- Using Azure Data Factory for data integration

- **Day 02**

Building Machine Learning Models

- Selecting algorithms for different scenarios
- Training machine learning models using Azure ML
- Utilizing automated machine learning (AutoML)
- Experiment tracking with Azure ML

- **Day 03**

Model Evaluation and Optimization

- Evaluating model performance metrics
- Hyperparameter tuning techniques
- Cross-validation and model selection
- Handling imbalanced datasets

Model Deployment

- Deploying models as web services
- Using Azure Kubernetes Service for model deployment
- Configuring endpoints and testing deployments
- Versioning and rollback of models

- **Day 04**

Consuming Deployed Models

- Integrating models with applications
- Using Azure Logic Apps and Power Apps
- Securing access to deployed models
- Monitoring and logging model performance

• Day 05

Model Management and Governance

- Maintaining and retraining models
- Implementing model governance practices
- Managing data drift and model accuracy
- Best practices for model lifecycle management

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
Sept. 21, 2025	Sept. 25, 2025	5 days	4250.00 \$	UAE - Dubai
May 12, 2025	May 16, 2025	5 days	4950.00 \$	Spain - Barcelona
Aug. 18, 2025	Aug. 22, 2025	5 days	4250.00 \$	UAE - Dubai