

Hyperscaler - Azure for Data Engineers and Data Scientist

Duration - 6 Days / 48 Hours

Program Description

This 2-track, 48-hours intensive program designed to empower Data Engineers and Data Scientists with essential skills to leverage Microsoft Azure's ecosystem for data storage, transformation, machine learning, and model deployment. The training emphasizes real-world, hands-on experience with services such as Azure Data Lake, Synapse Analytics, Azure SQL, Azure Data Factory, Azure Databricks, Azure Machine Learning, and Azure OpenAI.

Program Structure Azure for Data Engineers – 24 Hours

Overview

Learn Azure storage, relational and warehouse databases, data lakes, pipeline orchestration, and data transformation using Azure-native services.

Learning Goals

- ❖ Understand Microsoft Azure's storage architecture and options.
- ❖ Master Azure SQL and database schema design concepts
- ❖ Create and manage pipelines using Azure Data Factory
- ❖ Implement data workflows with Azure Databricks and Data Lakes
- ❖ Work with Azure Synapse Analytics for data warehousing and analytics.
- ❖ Integrate Snowflake on Azure for modern data warehousing use cases.

Course Topics

- ❖ Azure Cloud and Storage Essentials
- ❖ Relational Databases with Azure SQL
- ❖ Azure Data Factory and Data Pipelines
- ❖ Azure Databricks for Data Engineering
- ❖ Data Lakes and Lakehouse Architecture
- ❖ Azure Synapse Analytics
- ❖ Snowflake on Azure
- ❖ Azure Fabric

Program Structure Azure for Data Scientists & ML Engineers – 24 Hours

Overview

Focus on Azure Machine Learning, MLOps, AI services, and model deployment with Azure OpenAI and integration into real-world applications.

Learning Goals

- ❖ Utilize Azure Machine Learning Studio for model development and deployment.
- ❖ Perform data preparation and feature engineering with Azure Databricks
- ❖ Automate ML model deployment using Flask, Docker, and Kubernetes
- ❖ Implement MLOps practices on Azure.
- ❖ Leverage Azure OpenAI for generative AI use cases.

Course Topics

- ❖ Azure Machine Learning Introduction
- ❖ Feature Engineering and Data Preparation
- ❖ MLOps and Model Deployment
- ❖ Monitoring and Scaling ML Models
- ❖ Azure OpenAI Integration
- ❖ Cloud ML Operations