

Data Factory and Fabric Combined Training

Course Duration: 64 Hours

Course Code: ADF-FAB-01

1. Course Overview

This combined training on Azure Data Factory and Microsoft Fabric provides a comprehensive understanding of modern data integration, transformation, and analytics. Participants will learn how to build scalable data pipelines, manage data workflows, and leverage unified analytics using Microsoft Fabric for real-world business scenarios.

2. What You'll Learn

- Fundamentals of Azure Data Factory and Microsoft Fabric
- Building and managing data pipelines
- Data ingestion, transformation, and orchestration
- Working with Dataflows and ETL processes
- Integration with Azure services and Fabric components
- Real-time analytics and reporting techniques
- Monitoring, troubleshooting, and optimization

3. Target Audience

- Data Engineers
- Data Analysts
- BI Professionals
- Cloud Engineers
- IT Professionals working with data platforms
- Freshers looking to build a career in data engineering

4. Pre-Requisites

- Basic understanding of databases and SQL
- Familiarity with cloud concepts (preferably Azure)
- Basic knowledge of data warehousing concepts
- Understanding of programming concepts is a plus

5. Course Content

Module 1: Introduction to Data Engineering

- Overview of Data Engineering concepts
- Introduction to Azure ecosystem

Module 2: Azure Data Factory (ADF)

- ADF Architecture and Components
- Creating Pipelines and Activities
- Data Integration and Transformation
- Triggers and Scheduling
- Monitoring and Debugging

Module 3: Data Transformation

- Mapping Data Flows
- Data Wrangling
- ETL vs ELT concepts

Module 4: Microsoft Fabric Overview

- Introduction to Microsoft Fabric
- Components: Data Factory, Synapse, Power BI Integration
- Lakehouse Architecture

Module 5: Working with Fabric

- Data ingestion in Fabric
- Data Engineering in Fabric
- Data Warehousing and Real-Time Analytics

Module 6: Integration & Use Cases

- Integrating ADF with Fabric
- End-to-end Data Pipeline Projects
- Real-world Case Studies

Module 7: Monitoring & Optimization

- Performance tuning
- Error handling
- Best practices