

# MICROSOFT FABRIC DATA

## ENGINEER

DP-700T00-A

**Duration: 4 days; Instructor-led | Virtual Instructor-led**

### WHAT WILL YOU LEARN

This course covers methods and practices to implement data engineering solutions by using Microsoft Fabric. Students will learn how to design and develop effective data loading patterns, data architectures, and orchestration processes. Objectives for this course include ingesting and transforming data and securing, managing, and monitoring data engineering solutions. This course is designed for experienced data professionals skilled at data integration and orchestration, such as those with the DP-203: Azure Data Engineer certification.

### AUDIENCE

This audience for this course is data professionals with experience in data extraction, transformation, and loading. DP-700 is designed for professionals who need to create and deploy data engineering solutions using Microsoft Fabric for enterprise-scale data analytics. Learners should also have experience at manipulating and transforming data with one of the following programming languages: Structured Query Language (SQL), PySpark, or Kusto Query Language (KQL).

### METHODOLOGY

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises.

### COURSE CONTENTS

#### Module 1: Ingest data with Microsoft Fabric

Explore how Microsoft Fabric enables you to ingest and orchestrate data from various sources (such as files, databases, or web services) through dataflows, notebooks, and pipelines.

- Ingest Data with Dataflows Gen2 in Microsoft Fabric
- Orchestrate processes and data movement with Microsoft Fabric
- Use Apache Spark in Microsoft Fabric
- Get started with Real-Time Intelligence in Microsoft Fabric
- Use real-time eventstreams in Microsoft Fabric

#### Prerequisites

Familiarity with Microsoft Fabric: Getting started with Fabric

#### Module 2: Implement a Lakehouse with Microsoft Fabric

This learning path introduces the foundational components of implementing a data lakehouse with Microsoft Fabric.

- Introduction to end-to-end analytics using Microsoft Fabric
- Get started with lakehouses in Microsoft Fabric
- Use Apache Spark in Microsoft Fabric
- Work with Delta Lake tables in Microsoft Fabric
- Ingest Data with Dataflows Gen2 in Microsoft Fabric
- Orchestrate processes and data movement with Microsoft Fabric
- Organize a Fabric lakehouse using medallion architecture design

#### Prerequisites

You should be familiar with basic data concepts and terminology

#### Module 3: Implement Real-Time Intelligence with Microsoft Fabric

Real-time intelligence in Microsoft Fabric enables analysis of streaming events in real or near-real time.

- Get started with Real-Time Intelligence in Microsoft Fabric
- Use real-time eventstreams in Microsoft Fabric
- Work with real-time data in a Microsoft Fabric eventhouse
- Create Real-Time Dashboards with Microsoft Fabric

#### Prerequisites

The student should be familiar with Microsoft Fabric and SQL

#### Module 4: Implement a data warehouse with Microsoft Fabric

Explore the data warehousing process and learn how to load, monitor, secure, and query a warehouse in Microsoft Fabric.

- Introduction to end-to-end analytics using Microsoft Fabric
- Get started with data warehouses in Microsoft Fabric
- Load data into a Microsoft Fabric data warehouse
- Query a data warehouse in Microsoft Fabric
- Monitor a Microsoft Fabric data warehouse
- Secure a Microsoft Fabric data warehouse

#### Prerequisites

You should be familiar with basic data concepts and terminology.

#### **Module 5: Manage a Microsoft Fabric environment**

Microsoft Fabric is a Software-as-a-Service platform for data analytics. Learn how to manage your environment through Continuous Integration/Continuous Deployment (CI/CD), monitoring, and security.

- Implement continuous integration and continuous delivery (CI/CD) in Microsoft Fabric
- Monitor activities in Microsoft Fabric
- Secure data access in Microsoft Fabric
- Administer a Microsoft Fabric environment

#### Prerequisites

Before starting this learning path, you should have experience with Microsoft Fabric or Power BI. You should also have a basic understanding of data engineering and management concepts