

KOENIG SOLUTIONS • COURSE OUTLINE

Data Factory and Fabric Combined: Azure Integration and Analytics

Learn to build Azure Data Factory pipelines and Microsoft Fabric solutions for data ingestion, transformation and analytics.

56 Hours

DURATION

9

MODULES

36

TOPICS

COURSE OVERVIEW

This course covers Azure Data Factory, beginning with storage types, ADLS Gen2, and building pipelines with linked services, datasets and copy activities. It progresses through transforming data with Mapping Data Flow, managing CI/CD with GitHub, building advanced pipelines with error handling, and integrating ADF with Azure SQL Database and Azure Synapse Analytics. It then moves into Microsoft Fabric, covering end-to-end analytics, lakehouses, Apache Spark, Delta Lake tables, Dataflow Gen2 ingestion, medallion architecture, and data warehouses. It concludes with scalability in Power BI, including model relationships, performance optimisation and model security.

WHO THIS COURSE IS FOR

Data Engineers

BI Developers

Data Analysts

Database Administrators

Cloud Solution Architects

TOOLS AND REQUIREMENTS

- Fabric: Official Lab
- Azure Data Factory: Azure Pass and Referential Material

LEARNING OBJECTIVES

- Explain different storage types and ADLS Gen2 concepts
- Build Azure Data Factory pipelines using linked services and datasets
- Implement data transformation using Mapping Data Flow
- Configure CI/CD for pipelines using GitHub
- Apply error handling and control flow in advanced pipelines
- Integrate Azure Data Factory with Azure SQL Database and Synapse Analytics
- Develop lakehouse and data warehouse solutions in Microsoft Fabric
- Optimise and secure Power BI models

9 Modules, 36 Topics

01

Introduction of Data Factory and Storage Types

TOPICS

- Overview of Different Type of Storage
- ADLS Gen2
- Storing and Accessing Data
- What Is Azure Data Factory and Why We Need It
- Link Services, Datasets and Copy Activity
- Copy Data Tool Activity
- Data Ingestion from Data Lake Store to Azure SQL Database

02

Ingestion and Transforming Data Using Data Flow

TOPICS

Introduction to Mapping Data Flow (MDF) · Debugging in MDF · Introduction to MDF Expression Builder · Scenarios for Using Mapping Data Flow

03

Control Flow CI/CD Using GitHub

TOPICS

- Saving Changes and Publish in GitHub
- Continuous Integration and Continuous Delivery

04

Advance Pipeline Using Multiple Components and Error Handling

TOPICS

- Foreach Loop, If Then Else Condition, Metadata Activity
- Configure Error Handling and Load It into Audit Table
- Lookup Activity and Stored Procedure Activity

05

Integration with Azure Services

TOPICS

Integrating ADF with Other Azure Services · Azure Data Lake Storage · Azure SQL Database · Azure Synapse Analytics

06

Course Introduction: Explore End-to-End Analytics with Microsoft Fabric

TOPICS

- Explore End-to-End Analytics with Microsoft Fabric
- Administer Microsoft Fabric
- Get Started with Lakehouses
- Use Apache Spark
- Work with Delta Lake Tables
- Secure a Fabric Lakehouse

07

Ingest Data with Dataflow Gen2 in Microsoft Fabric

TOPICS

- Use Data Factory Pipelines in Microsoft Fabric
- Ingest Data with Spark and Microsoft Fabric Notebooks
- Organize a Lakehouse Using Medallion Architecture

08

Get Started with Data Warehouses in Microsoft Fabric

TOPICS

Load Data into a Warehouse · Query a Warehouse · Monitor a Warehouse · Secure a Warehouse

09

Understand Scalability in Power BI

TOPICS

Create Model Relationships · Use Tools to Optimize Power BI Performance · Enforce Power BI Model Security

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

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Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

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✉ info@koenig-solutions.com