AZURE DATA ENGINEER TRAINING IN HYDERABAD

Azure Data Engineer Course Syllabus

Azure Data Factory · ADLS Gen2 · Databricks & PySpark · Synapse · Microsoft Fabric · DP-700 preparation

90 hours	18 modules	5 projects	DP-700
Training over 3 months	Fundamentals to capstone	Hands-on, end-to-end	Fabric Data Engineer Associate prep

01 Data Engineering Fundamentals

What a data engineer is accountable for, ETL versus ELT, batch versus streaming, and modern data architecture patterns.

You will cover: ETL vs ELT · Batch vs streaming · Pipeline anatomy · Architecture patterns

Lab: map an existing reporting problem into a pipeline design.

Outcome: you can describe a pipeline before you build one.

02 SQL for Data Engineers

SQL from the ground up, at the depth transformation logic actually needs.

You will cover: Joins and CTEs · Window functions · Stored procedures · Query optimisation

Lab: write incremental-load queries against a sample sales schema.

Tools: Azure SQL, SSMS.

03 Python for Data Engineering

Python fundamentals through to API ingestion and scripted automation.

You will cover: Data structures · File handling · Pandas · REST APIs

Lab: pull data from a public REST API and land it as partitioned files.

04 Microsoft Azure Fundamentals

Azure architecture and the portal, aligned with AZ-900 concepts. We guide you through Azure subscription setup and resource provisioning for the labs.

You will cover: Resource groups · Subscriptions · Azure Storage · Identity basics

Lab: provision your own resource group and storage account, with a cost-conscious lab configuration.

05 Azure Data Lake Storage Gen2

How to organise a lake so it stays usable, with the access control an auditor could follow.

You will cover: Storage accounts · Hierarchical namespace · ACLs and security · Bronze/silver/gold

Lab: build a bronze/silver/gold folder structure with correct ACLs.

06 Azure Data Factory

Azure Data Factory is one of the core services commonly discussed in Azure Data Engineer interviews, covered here end to end.

You will cover: Pipelines and datasets · Parameters and triggers · Integration Runtime · Incremental loading

Lab: a parameterised pipeline that loads multiple source tables incrementally with watermarking.

07 Azure Databricks

Distributed transformation taught as production patterns, not tutorials.

You will cover: Clusters and notebooks · Apache Spark · PySpark transforms · Delta Lake

Lab: clean and conform raw ingested data into Delta tables.

08 Azure Synapse Analytics

Azure Synapse Analytics remains relevant for organisations operating Synapse-based data platforms alongside newer Microsoft Fabric workloads.

You will cover: Dedicated SQL pools · Serverless SQL · Synapse pipelines · Spark pools

Lab: query lake files with serverless SQL and load a dedicated pool.

09 Data Transformation

Pipelines that fail safely instead of silently.

You will cover: Cleansing and validation · Data quality checks · Quarantine patterns · Reusable transforms

Lab: build a validation layer that quarantines bad records instead of failing the run.

10 Data Warehousing

You design the target, not just move data into it.

You will cover: Star and snowflake schema · Fact and dimension tables · Slowly changing dimensions · Dimensional modelling

Lab: model a retail sales warehouse and implement SCD Type 2.

11 Azure SQL and Databases

The source side of a real migration, handled properly.

You will cover: Azure SQL Database · Connectivity · Query optimisation · Data migration

Lab: migrate an on-premises sample database into Azure SQL.

12 Microsoft Fabric

The platform the current Microsoft Fabric certification is built on, taught as a full module with labs.

You will cover: OneLake · Lakehouse and Warehouse · Dataflows Gen2 · Fabric pipelines

Lab: build a Lakehouse in Fabric and load it from OneLake shortcuts.

13 Real-Time Data Engineering

Streaming architecture is a common topic in experienced-level data engineering interviews.

You will cover: Streaming concepts · Event-driven design · Azure Event Hubs · Structured Streaming

Lab: ingest an event stream and write it to a Delta table in near real time.

14 Data Security and Governance

No credentials left in your notebooks.

You will cover: Entra ID and RBAC · Azure Key Vault · Managed identities · Governance

Lab: move every pipeline secret into Key Vault and grant access via managed identity.

15 DevOps for Data Engineering

Your work ships the way a team ships.

You will cover: Git and GitHub · Azure DevOps · CI/CD pipelines · Environment promotion

Lab: deploy an ADF pipeline from dev to test through a release pipeline.

16 Advanced Data Engineering

A portfolio piece that shows production-style, reusable pipeline design.

You will cover: Metadata-driven pipelines · Medallion architecture · Performance tuning · Production patterns

Lab: convert a hard-coded pipeline into a metadata-driven framework that loads any table from a control table.

17 DP-700 Certification Preparation

DP-700 is current; DP-203 was retired on 31 March 2025. Preparation follows the latest official Microsoft Learn study guide, including the skills-measured update effective 19 October 2026.

You will cover: Skills-measured walkthrough · Practice questions · Exam-day mechanics · Annual renewal

Outcome: you sit the exam knowing its shape.

18 Capstone Projects

Production-style end-to-end builds you keep, document and demo in interviews.

You will cover: End-to-end pipeline · Architecture diagram · Portfolio write-up · Interview walkthrough

Projects: Retail sales pipeline · E-commerce warehouse · Real-time streaming analytics · Metadata-driven ETL framework · Microsoft Fabric Lakehouse build

---

Modes and fees (as of November 2026): Classroom at JNTU/KPHB, Hyderabad – ₹25,000 · Live online – ₹23,000. The Microsoft exam fee is paid separately to Microsoft.

Centre: Azure Trainings, 3rd Floor, Dr Atmaram Estates, near JNTU College Metro Station, Hyderabad 500072 · **Phone / WhatsApp:** +91 98824 98844

Full course details and upcoming batches: azuretrainings.in/azure-data-engineer-training-in-hyderabad/