Microsoft Certified: Fabric Analytics Engineer Associate (DP-600)

This intermediate DP-600 training prepares learners to integrate diverse data sources, create and deploy data models, implement advanced analytics, and optimize performance with Microsoft Fabric.

CBT Nuggets course material →

STUDY PLAN

WEEK 1

Understand Microsoft Fabric Administration — 154 min.

Understand OneLake Architecture	14
License and Explore Fabric (And Power BI)	14
Explore the Admin Settings	13
Other Administrative Dev Tools	7
CHALLENGE	4

Perform ETL Ops with Dataflows Gen2

Introducing Dataflows	2
Extract Data	11
Aggregate Data	8
Merge Data	5
Filter Data	3
Rank Data	2
Publish Data to a Lakehouse	8
Schedule Automatic Data Refreshes	4
CHALLENGE	7

Perform Complex ETL with Data Pipelines

Introducing Data Factory Pipelines	1
Create a Data Source in Azure	11
Create Your Dataflow to Transform Data	7
Prep the Data Destinations	10
Set the Data Destination and Create a Pipeline	12
Validate and Run the Pipeline	4
CHALLENGE	7

WEEK 2

Implement and Explore Lakehouses — 152 min.

Introducing Fabric Lakehouses	1
Recall Why OneLake and Lakehouses Matter	15
Get Some Sample Data	2
Create a Lakehouse and Upload Data Files	7
Load Data Into Delta Tables	10
Explore the SQL Analytics Endpoint	9
Create a Shortcut	8
CHALLENGE	6

Build Queries and Reports on Lakehouse

Introducing Lakehouse Frontend Data Analysis	1
Understand Where Frontend Analytics Comes In	6
Create a Visual Query	5
Filter and Organize Data	5
Transform and Add Columns	5
Work with Semantic Models	15
Create Reports	5
CHALLENGE	6

Work with Data Warehouses

Introducing Data Warehouses	1
Creating a Data Warehouse	8
Perform DDL Operations	7
INSERT and UPDATE Operations	8
Alter Tables... Sort of	6
Update Records with Calculations	5
Copy Data From External Sources with COPY INTO	6
CHALLENGE	5

WEEK 3

Work with Spark Notebooks — 152 min.

Introducing Fabric Notebooks	1
What Spark Really Is	7
Load Data Into Spark Notebooks	15
Set and Alter Schema Data Types and Columns	11
Filter Data	4
Aggregate, Group, and Sort Data	5
CHALLENGE	5

Integrate Spark Notebooks with Lakehouse

Introducing Data Querying and Writing in Notebooks	1
Join Dataframes	10
Write Files to a Lakehouse	9
Write Data to Delta Tables	5
Querying with SQL and Python	9
Scheduling and Orchestrating Notebooks	5
CHALLENGE	1

Begin Work with Semantic Models

Introducing Semantic Models	2
Get Some Data	9
Create Semantic Model Relationships	1
Auto-Generate a Report from Your Model	4
Create DAX Measures	5
Connect to Fabric with Power BI Desktop	7
Connect to the SQL Analytics Endpoint	4

Publish Apps	10
CHALLENGE	5

Design Semantic Models

Introducing Semantic Model Design	1
Dimensions and Facts	10
Star and Snowflake Schema	6

WEEK 4

151 min.

1st Form Normalization	9
2nd and 3rd Form Normalization	8
What Works Best for Analytics	3
Merge Queries in Power Query	4
CHALLENGE	4

Learn DAX Fundamentals

Introducing DAX and DAX Studio	1
Install DAX Studio	5
EVALUATE	8
ORDER BY and FILTER	5
SUMMARIZECOLUMNS	6
Basic DAX Aggregations	4
DEFINE	4
Iterator (or X) Functions	4
CALCULATE	4
Datetime Functions	4
CHALLENGE	4

Use External Semantic Modeling Apps

Introducing External Modeling Tools	1
DAX Studio Performance Analysis	10
DAX Studio VertiPaq Analyzer	6
ALM Toolkit	8
Install and Browse Tabular Editor	6
Use Tabular Editor Best Practices Analyzer	4
Object Level Security	6
Row Level Security	12
CHALLENGE	5

Implement Calculation Groups

Understand Measure Sprawl	7
Create a Calculation Group	1
Create Calculation Items	8

WEEK 5

155 min.

Use Calculation Groups in a Report	10
Add Field Parameters to Switch Measures	6
Create Calculation Groups in Power BI	4
CHALLENGE	5

Leverage the XMLA Endpoint

Introducing the XMLA Endpoint	1
Understand the Point of XMLA	8
Governance and Configuration	4
Connect and Query with SSMS	7
Download and Deploy Models with Tabular Editor	7
Query Models with DAX Studio	5

Compare and Ship Models with ALM Toolkit	7
CHALLENGE	6

Understand the Analytics Lifecycle

Introducing the Analytics Lifecycle	1
Connect a Workspace to Git	14
Use Source Control within Fabric	11
Use Power BI Project (pbip) Files	5
Use Power BI Template (pbit) Files	4
Implement a Power BI Deployment Pipeline	10
CHALLENGE	7

Optimize Fabric

Introducing Fabric Optimization	1
Profiling Data	17
Storage Modes	6
File Partitioning	9

WEEK 6

14 min.

Partition Existing Tables	4
High Capacity Notebook Sessions	3
OPTIMIZE and VACUUM	2
V-Order and Optimized Writes	4
CHALLENGE	1