



MICROSOFT TRAINING

DP-601: Implementing a Lakehouse with Microsoft Fabric

Implement a Lakehouse with Microsoft Fabric, optimizing robust data solutions. Prepare for your DP-601 certification.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This intermediate-level course, DP-601: Implementing a Lakehouse with Microsoft Fabric, is meticulously designed for data professionals seeking to master the unified data platform capabilities of Microsoft Fabric. Participants will dive deep into the architecture and implementation of a modern data lakehouse solution, leveraging Fabric's powerful tools for data ingestion, transformation, warehousing, and analytics. The course focuses on building robust, scalable data solutions that bridge the gap between traditional data warehousing and modern data lakes, providing a comprehensive understanding of how to manage and derive insights from diverse data sources efficiently. By completing this course, you will gain hands-on expertise in critical components such as Data Engineering, Data Warehousing, Real-Time Analytics, and Business Intelligence within the Microsoft Fabric ecosystem. You will learn to utilize Lakehouses, Data Warehouses, Notebooks, and Power BI semantic models to create end-to-end data solutions. This certification not only enhances your technical skill set but also positions you as a valuable asset capable of driving data-driven decision-making and innovation within your organization, making you proficient in the latest trends in data architecture and analytics.

Duration	2 hours
Level	Intermediate
Vendor	Microsoft
Exam Code	DP-601

COURSE CURRICULUM

01 Module 1: Get Started with Microsoft Fabric

- Introduction to Microsoft Fabric and its components
- Understanding the Lakehouse architecture and its benefits
- Navigating the Fabric experience and workspaces
- Exploring Fabric items: Lakehouse, Data Warehouse, Notebooks, etc.

02 Module 2: Ingest and Transform Data

- Loading data into Lakehouse using Data Pipelines
- Performing data transformation with Dataflows Gen2
- Utilizing Apache Spark notebooks for complex data transformations
- Implementing various data ingestion strategies for diverse sources

03 Module 3: Implement a Lakehouse and Data Warehouse

- Understanding and working with Delta Lake tables
- Implementing a Medallion architecture within a Lakehouse
- Designing and implementing a Data Warehouse in Fabric
- Querying data using the SQL endpoint of a Lakehouse and Data Warehouse

04 Module 4: Implement Semantic Models

- Building Power BI semantic models from Lakehouse and Data Warehouse data
- Creating relationships, hierarchies, and calculated columns/measures
- Optimizing semantic models for enhanced performance
- Using Data Analysis Expressions (DAX) for advanced calculations

05 Module 5: Secure and Monitor Microsoft Fabric Data

- Implementing robust security for Lakehouses and Data Warehouses

- Managing access control, roles, and permissions in Fabric
- Monitoring Fabric workloads, performance, and resource utilization
- Understanding data governance and compliance considerations within Fabric

06 Module 6: Work with Fabric Real-Time Analytics and Data Science

- Introduction to Real-Time Analytics capabilities in Fabric
- Exploring KQL databases and KQL Querysets for streaming data
- Integrating data science workloads with the Lakehouse
- Leveraging Fabric for end-to-end data analytics solutions and machine learning

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Microsoft Fabric Data Engineer**
- > **Azure Lakehouse Architect**
- > **Business Intelligence Developer (specializing in Fabric/Power BI)**

FREQUENTLY ASKED QUESTIONS

Q: What specific challenges does the Microsoft Fabric Lakehouse architecture help solve for organizations managing large datasets?

The Microsoft Fabric Lakehouse architecture is designed to address common challenges such as data silos, complex ETL processes, and difficulties in combining structured and unstructured data for analytics. It unifies data warehousing and data lake capabilities, simplifying data ingestion, transformation, and analysis. This enables organizations to achieve faster insights, reduce operational overhead, and democratize access to reliable data for various business units, leading to more agile data-driven decision-making.

Q: What are the recommended prerequisites for someone looking to take the DP-601 course and maximize their learning experience?

To maximize your learning from the DP-601 course, it is highly recommended to have a foundational understanding of data concepts, including relational databases and data warehousing principles. Familiarity with Azure data services (like Azure Data Lake Storage, Azure Synapse Analytics) and experience with SQL queries and basic Python for data manipulation will be beneficial. While not strictly required, prior exposure to Power BI for data modeling and reporting will also provide a strong advantage.

Q: How does mastering the skills taught in DP-601 directly translate into improved efficiency or new capabilities in a data engineering role?

Mastering the skills in DP-601 significantly enhances a data engineer's efficiency by providing proficiency in Microsoft Fabric's unified platform. You'll gain the ability to rapidly ingest and transform data using Data Pipelines and Dataflows Gen2, leverage Spark notebooks for advanced data processing, and implement robust Delta Lake tables within a Lakehouse. This translates into faster data pipeline development, improved data quality, streamlined data governance, and the capability to build scalable, high-performance data solutions that seamlessly integrate with analytics and BI tools, ultimately accelerating the delivery of actionable insights.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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