Data Engineering on Microsoft Azure

CODICE	**DP-203T00**
DURATA	**4 gg**
PREZZO	**1.450,00 €**
EXAM	

DESCRIZIONE

In this course, the student will learn how to implement and manage data engineering workloads on Microsoft Azure, using Azure services such as Azure Synapse Analytics, Azure Data Lake Storage Gen2, Azure Stream Analytics, Azure Databricks, and others. The course focuses on common data engineering tasks such as orchestrating data transfer and transformation pipelines, working with data files in a data lake, creating and loading relational data warehouses, capturing and aggregating streams of real-time data, and tracking data assets and lineage.

TARGET

The primary audience for this course is data professionals, data architects, and business intelligence professionals who want to learn about data engineering and building analytical solutions using data platform technologies that exist on Microsoft Azure. The secondary audience for this course data analysts and data scientists who work with analytical solutions built on Microsoft Azure.

PREREQUISTI

Successful students start this course with knowledge of cloud computing and core data concepts and professional experience with data solutions.

Specifically completing:

- AZ-900 - Azure Fundamentals
- DP-900 - Microsoft Azure Data Fundamentals

CONTENUTI

Get started with data engineering on Azure

- Introduction to data engineering on Azure
- Introduction to Azure Data Lake Storage Gen2
- Introduction to Azure Synapse Analytics

Build data analytics solutions using Azure Synapse serverless SQL pools

- Use Azure Synapse serverless SQL pool to query files in a data lake
- Use Azure Synapse serverless SQL pools to transform data in a data lake
- Create a lake database in Azure Synapse Analytics
- Secure data and manage users in Azure Synapse serverless SQL pools

Perform data engineering with Azure Synapse Apache Spark Pools

- Analyze data with Apache Spark in Azure Synapse Analytics
- Transform data with Spark in Azure Synapse Analytics
- Use Delta Lake in Azure Synapse Analytics

Transfer and transform data with Azure Synapse Analytics pipelines

- Build a data pipeline in Azure Synapse Analytics
- Use Spark Notebooks in an Azure Synapse Pipeline

Implement a Data Analytics Solution with Azure Synapse Analytics

- Introduction to Azure Synapse Analytics
- Use Azure Synapse serverless SQL pool to query files in a data lake
- Analyze data with Apache Spark in Azure Synapse Analytics
- Use Delta Lake in Azure Synapse Analytics
- Analyze data in a relational data warehouse
- Build a data pipeline in Azure Synapse Analytics

Work with Data Warehouses using Azure Synapse Analytics

- Analyze data in a relational data warehouse
- Load data into a relational data warehouse
- Manage and monitor data warehouse activities in Azure Synapse Analytics
- Secure a data warehouse in Azure Synapse Analytics

Work with Hybrid Transactional and Analytical Processing Solutions using Azure Synapse Analytics

- Plan hybrid transactional and analytical processing using Azure Synapse Analytics

- Implement Azure Synapse Link with Azure Cosmos DB
- Implement Azure Synapse Link for SQL

Implement a Data Streaming Solution with Azure Stream Analytics

- Get started with Azure Stream Analytics
- Ingest streaming data using Azure Stream Analytics and Azure Synapse Analytics
- Visualize real-time data with Azure Stream Analytics and Power BI

Implement a data lakehouse analytics solution with Azure Databricks

- Explore Azure Databricks
- Perform data analysis with Azure Databricks
- Use Apache Spark in Azure Databricks
- Manage data with Delta Lake
- Build data pipelines with Delta Live Tables
- Deploy workloads with Azure Databricks Workflows