

Implementing an Azure Data Solution (DP-200.1)

Modality: On Demand

Duration: 16 Hours

This course prepares you for the DP-200 Exam leading to DP-200 Certification. This course does not include the Official Exam Voucher, however, you can request to purchase the Official Exam Voucher separately.

About this course:

This course is designed to teach students how to implement different data platform technologies as solutions while also ensuring that they are in accordance with the business and technical needs. These would include on-premises, cloud and hybrid data scenarios while incorporating both relational and No-SQL data. Participants will also be taught how to process data using an array of multiple techniques and different languages for streaming and batch data.

Moreover, participants will also be taught the basics of data security and effectively implementing it through the techniques of authentication, authorization and in accordance with the data policies and data standards. For both the data storage and data processing activities, the participants will also be trained to define and implement data solution monitoring. Additionally, this course will impart skills needed to manage and troubleshoot Azure data solutions such as includes the optimization and disaster recovery of big data, batch processing and streaming data solutions.

Audience:

This course is designed to cater to the following audience;

- Programmers and developers

Prerequisites:

The following pre requisites are absolutely necessary for taking this course.

- Significant professional experience in relevant field
- Have completed the course on Azure fundamentals or have working technical knowledge of Azure fundamentals which can be considered equivalent to the aforementioned course.

Course Outline:

Azure for the Data Engineer

- Module Introduction
- The Evolving World of Data
- Surveying the Azure Data Platform
- Data Engineering Roles and Responsibilities
- Course Case Study
- Module Summary

Working with Data Srage

- Module Introduction
- Choose a data srage approach in Azure
- Introducing Azure Srage
- Introduction Data Lake Srage
- Create an Azure Data Lake Srage Gen2
- Module Summary

Enabling Team Based Data Science with Azure Databricks

- Module Introduction
- Introduction Azure Databricks
- Working with Azure Databricks
- Reading Data using Azure Databricks
- Performing Transformations with Azure Databricks
- Module Summary

Building Globally Distributed Databases with Azure Databricks

- Module Introduction
- Create an Azure Cosmos DB database built scale
- Insert and query data in your Azure Cosmos DB database
- Build a .NET Core app for Azure Cosmos DB in Visual Studio Code
- Distribute your Data Globally with Azure Cosmos DB
- Module Summary

Working with Relational Data Sres in the Cosmos DB

- Module Introduction
- Module Introduction
- Azure SQL Data Warehouse
- Creating and Querying an Azure SQL Data Warehouse
- Using PolyBase Load Data in Azure SQL Data Warehouse
- Module Summary

Performing Real Time Analytics with Stream Analytics

- Moudle Introductions
- Introducing Data Streams and Event Processing
- Data Ingestion with Event Hubs

- Processing Data with Stream Analytics Jobs
- Module Summary

Orchestrating Data Movement with Azure Data Factory

- Module Introduction
- Introducing Azure Data Factory
- Azure Data Factory Components
- Integrate Azure Data Factory with Databricks
- Module Summary

Securing Azure Data Platforms

- Module Introduction
- Introduction Security
- Key Security Components
- Securing Storage Accounts and Data Lake Storage
- Securing Data Services
- Securing Streaming Data
- Module Summary

Monitoring and Troubleshooting Data Storage and Processing

- Module Introduction
- General Azure Monitoring Capabilities
- Troubleshoot Common Data Platform Issues
- Troubleshoot Common Data Processing Issues
- Managing Disaster Recovery
- Module Summary