

Implementing an Azure Data Solution (DP-200.1)

Modality: Self-Paced Learning

Duration: 16 Hours

SATV Value:

CLC:

NATU:

SUBSCRIPTION: Learn, Master

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:

In this course, the students will implement various data platform technologies into solutions that are in line with business and technical requirements including on-premises, cloud, and hybrid data scenarios incorporating both relational and No-SQL data. They will also learn how to process data using a range of technologies and languages for both streaming and batch data.

The students will also explore how to implement data security including authentication, authorization, data policies and standards. They will also define and implement data solution monitoring for both the data storage and data processing activities. Finally, they will manage and troubleshoot Azure data solutions which includes the optimization and disaster recovery of big data, batch processing and streaming data solutions.

Audiences:

- Programmers and Developers

Prerequisites:

- In addition to their professional experience, students who take this training should have technical knowledge equivalent to the course Azure Fundamentals

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