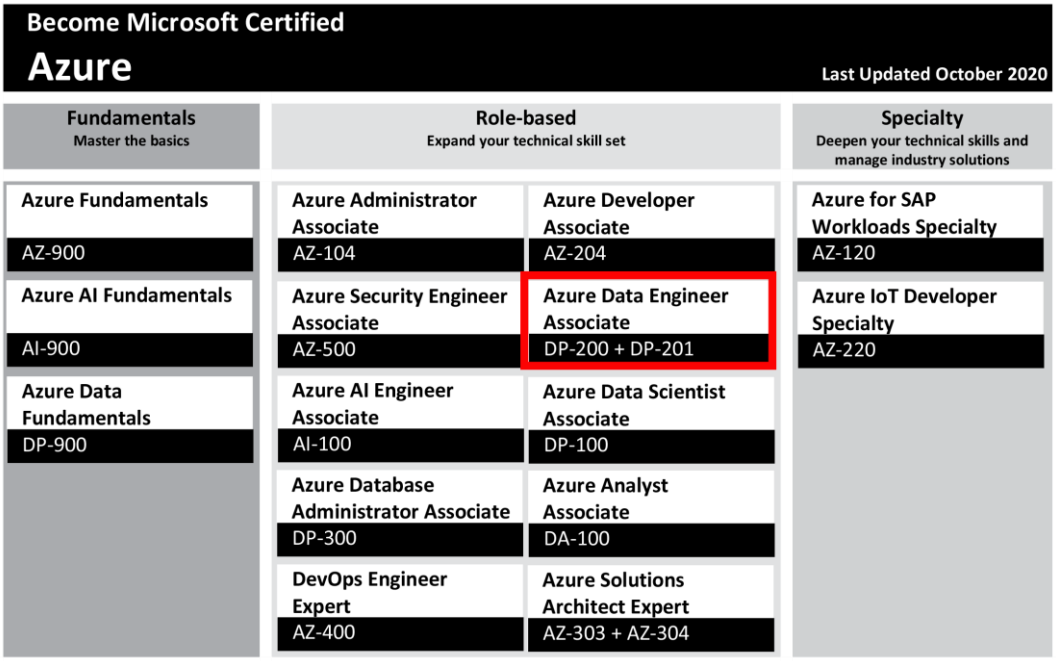
DP-200-201 - Microsoft Certified: Azure Data Engineer Associate

These 2 courses are designed for IT Professionals who will learn how to 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

These courses help prepare for the exams « DP-200 - Implementing an Azure Data Solution » and « DP-201: Designing an Azure Data Solution » to obtain the title « Microsoft Certified: Azure Data Engineer Associate ».



1. DP-200 - Implementing an Azure Data Solution

Overview

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.

Target Audience :

The primary audience for this course is data professionals, data architects, and business intelligence professionals who want to learn about the data platform technologies that exist on Microsoft Azure.

The secondary audience for this course is individuals who develop applications that deliver content from the data platform technologies that exist on Microsoft Azure.

Objectives :

After completing this module, students will be able to:

- Explain the evolving world of data
- Survey the services in the Azure Data Platform

- Identify the tasks that are performed by a Data Engineer
- Describe the use cases for the cloud in a Case Study
- Choose a data storage approach in Azure
- Create an Azure Storage Account
- Explain Azure Data Lake Storage
- Upload data into Azure Data Lake
- Explain Azure Databricks
- Work with Azure Databricks
- Read data with Azure Databricks
- Perform transformations with Azure Databricks
- Create an Azure Cosmos DB database built to 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
- Use Azure SQL Database
- Describe Azure Data Warehouse
- Creating and Querying an Azure SQL Data Warehouse
- Using PolyBase to Load Data into Azure SQL Data Warehouse
- Explain data streams and event processing
- Data Ingestion with Event Hubs
- Processing Data with Stream Analytics Jobs
- Azure Data Factory and Databricks
- Azure Data Factory Components
- Explain how Azure Data Factory works
- An introduction to security
- Key security components
- Securing Storage Accounts and Data Lake Storage
- Securing Data Stores
- Securing Streaming Data
- Explain the monitoring capabilities that are available
- Troubleshoot common data storage issues
- Troubleshoot common data processing issues
- Manage disaster recovery

Prerequisites :

In addition to their professional experience, students who take this training should have technical knowledge equivalent to the following courses:

- Azure fundamentals

2. DP-201 - Designing an Azure Data Solution

Overview

In this course, the students will design various data platform technologies into solutions that are in line with business and technical requirements. This can include on-premises, cloud, and hybrid data scenarios which incorporate relational, No-SQL or Data Warehouse data. They will also learn how to design process architectures using a range of technologies for both streaming and batch data.

The students will also explore how to design data security including data access, data policies and standards. They will also design Azure data solutions which includes the optimization, availability and disaster recovery of big data, batch processing and streaming data solutions.

Target Audience :

The audience for this course is data professionals, data architects, and business intelligence professionals who want to learn about the data platform technologies that exist on Microsoft Azure.

The secondary audience for this course is individuals who develop applications that deliver content from the data platform technologies that exist on Microsoft Azure.

Objectives :

After completing this module, students will be able to:

- Design with Security in mind
- Consider performance and scalability

- Design for availability and recoverability
- Design for efficiency and operations
- Core Principles of Creating Architectures
- Describe Lambda architectures from a Batch Mode Perspective
- Design an Enterprise BI solution in Azure
- Automate enterprise BI solutions in Azure
- Architect an Enterprise-grade conversational bot in Azure
- Case study
- Lambda architectures for a Real-Time Mode Perspective
- Architect a stream processing pipeline with Azure Stream Analytics
- Design a stream processing pipeline with Azure Databricks
- Create an Azure IoT reference architecture
- Defense in Depth Security Approach
- Identity Management
- Infrastructure Protection
- Encryption Usage
- Network Level Protection
- Application Security
- Adjust Workload Capacity by Scaling
- Optimize Network Performance
- Design for Optimized Storage and Database Performance
- Identifying Performance Bottlenecks
- Design a Highly Available Solution
- Incorporate Disaster Recovery into Architectures
- Design Backup and Restore strategies
- Maximize the Efficiency of your Cloud Environment
- Use Monitoring and Analytics to Gain Operational Insights
- Use Automation to Reduce Effort and Error

Prerequisites :

In addition to their professional experience, students who take this training should have technical knowledge equivalent to the following courses:

- Azure fundamentals
- DP-200: Implementing an Azure Data Solution

Duration and Price

Courses	Jours	CHF	CHF/j
DP-200 - Implementing an Azure Data Solution	3	2’250.-	750.-
DP-201 - Designing an Azure Data Solution	2	1’600.-	800.-

selon conditions générales. Le prix comprend toute la documentation distribuée.
Les cours se déroulent de 9 h 00 à 12 h 00 et 13 h 30 à 17 h 00