

DP-201: Designing an Azure Data Solution [DP-201T01-A] training inclusive Exam Voucher

Group Training

Training code	CGADP201CE
Spoken Language	English
Language Materials	English
Dayparts	4
Price	€1.100,00 excl. VAT No extra costs.

What is DP-201: Designing an Azure Data Solution [DP-201T01-A] inclusive Exam Voucher

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, NoSQL, or Data Warehouse data.

They will also learn how to design process architectures using a range of technologies for both streaming and batch data, design Azure data solutions, which includes the optimization, availability, and disaster recovery of big data, batch processing, and streaming data solutions. This course uses MOC (Microsoft Official Courseware) and will be given by an experienced MCT (Microsoft Certified Trainer).

See the below modules for more information:

Module 1: Data Platform Architecture Considerations

In this module, the students will learn how to design and build secure, scalable, and performant solutions in Azure by examining the core principles found in every good architecture. They will learn how using key principles throughout architecture, regardless of technology choice, can help you design, build, and continuously improve the architecture for an organization's benefit.

Lessons

- Core Principles of Creating Architectures
- Design with Security in Mind
- Performance and Scalability

- Design for availability and recoverability
- Design for efficiency and operations
- Case Study

Module 2: Azure Batch Processing Reference Architectures

In this module, students will learn the reference design and architecture patterns for dealing with the batch processing of data. The student will be exposed to dealing with the movement of data from on-premises systems into a cloud data warehouse and how it can be automated. The students will also be exposed to an AI architecture and how the data platform can integrate with an AI solution.

Lessons

- 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

Module 3: Azure Real-Time Reference Architectures

In this module, the students will learn the reference design and architecture patterns for dealing with streaming data. They will learn how streaming data can be ingested by Event Hubs and Stream Analytics to deliver real-time analysis of data. They will also explore a data science architecture that streams data into Azure Databricks to perform trend analysis. They will finally learn how an Internet of Things (IoT) architecture will require data platform technologies to store data.

Lessons

- Describe Lambda architectures for a Real-Time Perspective
- Architect a stream processing pipeline with Azure Stream Analytics
- Design a stream processing pipeline with Azure Databricks
- Create an Azure IoT reference architecture

Module 4: Data Platform Security Design Considerations

In this module, the students will learn how to incorporate security into an architecture design and learn the key decision points in Azure provided to help create a secure environment through all the layers of architecture.

Lessons

- Defense in Depth Security Approach
- Identity Management
- Infrastructure Protection
- Encryption Usage
- Network Level Protection
- Application Security

Module 5: Designing for Resiliency and Scale

In this module, students will learn scaling services to handle load. They will learn how identifying network bottlenecks and optimizing storage performance are important to ensure users have the best experience. They will also learn how to handle infrastructure and service failure, recover from the loss of data, and recover from a disaster by designing availability and recoverability into the architecture.

Lessons

- Adjust Workload Capacity by Scaling
- Optimize Network Performance
- Design for Optimized Storage and Database Performance
- Identify Performance Bottlenecks
- Design a Highly Available Solution
- Incorporate Disaster Recovery into Architectures
- Design Backup and Restore strategies

Module 6: Design for Efficiency and Operations

In this module, students will learn how to design an Azure architecture that is operationally-efficient and minimizes costs by reducing spend and they will understand how to design architectures that eliminate waste and gives them full visibility into what is being utilized in the organization's Azure environment.

Lessons

- Maximizing the Efficiency of your Cloud Environment
- Use Monitoring and Analytics to Gain Operational Insights
- Use Automation to Reduce Effort and Error

Who should attend the DP-201: Designing an Azure Data Solution [DP-201T01-A] inclusive Exam Voucher

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.

Also, you will receive an Exam Voucher. Enlist today!

Prerequisites

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
- DP-200 - Implementing an Azure Data Solution

Objectives

After completing this course, you will be able to:

Design with security, performance and scalability

- Design for availability, recoverability, efficiency and operations
- Understand the core principles of creating architectures
- Describe Lambda architectures from a Batch Mode Perspective
- Design and automate an Enterprise BI solution in Azure
- Architect an Enterprise-grade conversational bot in Azure
- Describe Lambda architectures for a Real-Time Mode Perspective

- Architect and design a stream processing pipeline with Azure Stream Analytics and Azure Databricks
- Create an Azure IoT reference architecture
- Defense in Depth Security Approach
- Identity Management and Encryption Usage
- Infrastructure and Network Level Protection
- Adjust Workload Capacity by Scaling
- Optimize Network Performance
- Design for Optimized Storage and Database Performance
- Incorporate Disaster Recovery into Architectures
- Maximize the Efficiency of your Cloud Environment
- Use Monitoring and Analytics to Gain Operational Insights
- Use Automation to Reduce Effort and Error

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