



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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**Sie erreichen uns hier**

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# AZ-204: Developing Solutions for Microsoft Azure

CODE:	LÄNGE:	PREIS:
MCS_AZ204T00	40 Hours (5 Tage)	€2,285.00

## Description

In diesem Kurs lernen Entwickler, wie sie End-to-End-Lösungen in Microsoft Azure erstellen können. Die Teilnehmer lernen, wie sie Azure Compute-Lösungen implementieren, Azure Functions erstellen, Web-Apps implementieren und verwalten, Lösungen mit Azure Storage entwickeln, Authentifizierung und Autorisierung implementieren und ihre Lösungen mit KeyVault und Managed Identities sichern. Die Teilnehmer lernen außerdem, wie sie sich mit Azure-Diensten und Diensten von Drittanbietern verbinden und diese nutzen können und wie sie ereignis- und nachrichtenbasierte Modelle in ihre Lösungen integrieren. Der Kurs deckt auch die Überwachung, Fehlersuche und Optimierung von Azure-Lösungen ab.

## Zielgruppe

Die Teilnehmer dieses Kurses sind an der Azure-Entwicklung oder am Bestehen der Zertifizierungsprüfung zum Microsoft Azure Developer Associate interessiert.

## Voraussetzungen

- Hands-on experience with Azure IaaS and PaaS solutions, and the Azure Portal.
- Experience writing in an Azure supported language at the intermediate level. (C#, JavaScript, Python, or Java)
- Ability to write code to connect and perform operations on, a SQL or NoSQL database product. (SQL Server, Oracle, MongoDB, Cassandra or similar)
- Experience writing code to handle authentication, authorization, and other security principles at the intermediate level.
- A general understanding of HTML, the HTTP protocol and REST API interfaces.
- If you are new to Azure and cloud computing consider one of the following resources:
  - Free online: Azure Fundamentals
  - Instructor-led course: AZ-900: Azure Fundamentals

## Inhalt

- Für dieses Seminar werden folgende Vorkenntnisse empfohlen:
- Hands-on experience with Azure IaaS and PaaS solutions, and the Azure Portal.
  - Experience writing in an Azure supported language at the intermediate level. (C#, JavaScript, Python, or Java)
  - Ability to write code to connect and perform operations on, a SQL or NoSQL database product. (SQL Server, Oracle, MongoDB, Cassandra or similar)
  - Experience writing code to handle authentication, authorization, and other security principles at the intermediate level.
  - A general understanding of HTML, the HTTP protocol and REST API interfaces.
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    - Free online: Azure Fundamentals
    - Instructor-led course: AZ-900: Azure Fundamentals
- expand\_more Detail-Inhalte
- Module 1: Creating Azure App Service Web Apps
- Students will learn how to build a web application on the Azure App Service platform. They will learn how the platform functions and how to create, configure, scale, secure, and deploy to the App Service platform.
- Azure App Service core concepts
  - Creating an Azure App Service Web App
  - Configuring and Monitoring App Service apps
  - Scaling App Service apps
- Lessons Azure App Service staging environments

## Module 2: Implement Azure functions

This module covers creating Functions apps, and how to integrate triggers and inputs/outputs in to the app. Lessons

- Azure Functions overview
- Developing Azure Functions
- Implement Durable Functions

## Module 3: Develop solutions that use blob storage

Students will learn how Azure Blob storage works, how to manage data through the hot/cold/archive blob storage lifecycle, and how to use the Azure Blob storage client library to manage data and metadata.

- Azure Blob storage core concepts
- Managing the Azure Blob storage lifecycle

Lessons Working with Azure Blob storage

## Module 4: Develop solutions that use Cosmos DB storage

Students will learn how Cosmos DB is structured and how data consistency is managed. Students will also learn how to create Cosmos DB accounts and create databases, containers, and items by using a mix of the Azure Portal and the .NET SDK.

- Azure Cosmos DB overview
- Azure Cosmos DB data structure

Lessons Working with Azure Cosmos DB resources and data

## Module 5: Implement IaaS solutions

This module instructs students on how to use create VMs and container images to use in their solutions. It covers creating VMs, using ARM templates to automate resource deployment, create and manage Docker images, publishing an image to the Azure Container Registry, and running a container in Azure Container Instances.

- Provisioning VMs in Azure
- Create and deploy ARM templates
- Create container images for solutions
- Publish a container image to Azure Container Registry

Lessons Create and run container images in Azure Container Instances

## Module 6: Implement user authentication and authorization

Students will learn how to leverage the Microsoft Identity Platform v2.0 to manage authentication and access to resources. Students will also learn how to use the Microsoft Authentication Library and Microsoft Graph to authenticate a user and retrieve information stored in Azure, and how and when to use Shared Access Signatures.

- Microsoft Identity Platform v2.0
- Authentication using the Microsoft Authentication Library
- Using Microsoft Graph

Lessons Authorizing data operations in Azure Storage

## Module 7: Implement secure cloud solutions

This module covers how to secure the information (keys, secrets, certificates) an application uses to access resources. It also covers securing application configuration information.

- Manage keys, secrets, and certificates by using the KeyVault API
- Implement Managed Identities for Azure resources

Lessons Secure app configuration data by using Azure App Configuration

## Module 8: Implement API Management

Students will learn how to publish APIs, create policies to manage information shared through the API, and to manage access to their APIs by using the Azure API Management service.

- API Management overview
- Defining policies for APIs

Lessons Securing your APIs

## Module 9: Develop App Service Logic Apps

This module teaches students how to use Azure Logic Apps to schedule, automate, and orchestrate tasks, business processes, workflows, and services across enterprises or organizations.

- Azure Logic Apps overview

Lessons Creating custom connectors for Logic Apps Students will learn how to build applications with event-based architectures.

- Implement solutions that use Azure Event Grid
- Implement solutions that use Azure Event Hubs

Lessons Implement solutions that use Azure Notification Hubs

## Module 10: Develop event-based solutions

## Module 11: Develop message-based solutions

Students will learn how to build applications with message-based architectures. Lessons

- Implement solutions that use Azure Service Bus
- Implement solutions that use Azure Queue Storage queues

## Module 12: Monitor and optimize Azure solutions

This module teaches students how to instrument their code for telemetry and how to analyze and troubleshoot their apps. Lessons

- Overview of monitoring in Azure
- Instrument an app for monitoring
- Analyzing and troubleshooting apps
- Implement code that handles transient faults

## Module 13: Integrate caching and content delivery within solutions

Students will learn how to use different caching services to improve the performance of their apps. Lessons

- Develop for Azure Cache for Redis
- Develop for storage on CDNs

## Test und Zertifizierung

### Wichtige Information

Dieses Seminar behandelt prüfungsrelevante Themen zum Microsoft Examen: AZ-204 Developing Solutions for Microsoft Azure  
Mögliche Zertifizierung: Microsoft Azure Developer Associate

## Kurstermine

Datum	Lokation	Time Zone	Sprache	Type	Durchführungsgarantie	PREIS
05 Aug 2024	Wien	CEDT	German	Classroom		€2,285.00
05 Aug 2024	Wien	CEDT	German	Instructor Led Online		€2,285.00
16 Sep 2024	Wien	CEDT	German	Classroom		€2,285.00
16 Sep 2024	Wien	CEDT	German	Instructor Led Online		€2,285.00
11 Nov 2024	Wien	CET	German	Classroom		€2,285.00
11 Nov 2024	Wien	CET	German	Instructor Led Online		€2,285.00
16 Dec 2024	Wien	CET	German	Classroom		€2,285.00
16 Dec 2024	Wien	CET	German	Instructor Led Online		€2,285.00

## Zusätzliche Information

[Diese Schulung ist auch als Vor-Ort-Schulung verfügbar. Bitte kontaktieren Sie uns, um mehr zu erfahren.](#)