

## AZ-204: Developing Solutions for Microsoft Azure

- **Formato do curso:** Presencial e Live Training
- **Localidade:** Lisboa
- **Data:** 21 Nov. 2022 a 25 Nov. 2022
- **Preço:** 1780€
- **Horário:** Laboral - das 9h00 às 17h00
- **Duração:** 35 horas

This course teaches developers how to create end-to-end solutions in Microsoft Azure.

Students will learn how to implement Azure compute solutions, create Azure Functions, implement and manage web apps, develop solutions utilizing Azure storage, implement authentication and authorization, and secure their solutions by using KeyVault and Managed Identities. Students will also learn how to connect to and consume Azure services and third-party services, and include event- and message-based models in their solutions.

The course also covers monitoring, troubleshooting, and optimizing Azure solutions.

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### Destinatários

Students in this course are interested in Azure development or in passing the Microsoft Azure Developer Associate certification exam.

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### Pré-requisitos

To be successful in this course, learners should have the following:

- 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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## Objetivos

- Prepare for Exam AZ-204: Developing Solutions for Microsoft Azure
- Explore hosting options, bindings, triggers, and how to use Durable Functions to define stateful workflows
- Create Azure Blob storage resources, manage data through the blob storage lifecycle, and work with containers and items by using the Azure Blob storage client library V12 for .NET
- Create Azure Cosmos DB resources with the appropriate consistency levels, choose and create a partition key, and perform data operations by using the .NET SDK V3 for Azure Cosmos DB
- Create and deploy virtual machine, deploy resources using Azure Resource Manager templates, and manage and deploy containers
- Implement authentication and authorization to resources by using the Microsoft identity platform, Microsoft Authentication Library, shared access signatures, and use Microsoft Graph
- Deploy apps in Azure by using Azure Key Vault, managed identities, and Azure App Configuration
- Create a backend API
- Build applications with event-based architectures by integrating Azure Event Grid and Azure Event Hubs in to your solution
- Build applications with message-based architectures by integrating Azure Service Bus and Azure Queue Storage in to your solution
- Instrument apps to enable Application Insights to monitor performance and help troubleshoot issues
- Improve the performance and scalability of your applications by integrating Azure Cache for Redis and Azure Content Delivery Network in to your solution

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## Programa

### **Create Azure App Service web apps**

- Explore Azure App Service
- Configure web app settings
- Scale apps in Azure App Service
- Explore Azure App Service deployment slots

### **Implement Azure functions**

- Explore Azure Functions
- Develop Azure Functions
- Implement Durable Functions

### **Develop solutions that use Blob storage**

- Explore Azure Blob storage
- Manage the Azure Blob storage lifecycle
- Work with Azure Blob storage

### **Develop solutions that use Azure Cosmos DB**

- Explore Azure Cosmos DB
- Implement partitioning in Azure Cosmos DB
- Work with Azure Cosmos DB

### **Implement infrastructure as a service solutions**

- Provision virtual machines in Azure
- Create and deploy Azure Resource Manager templates
- Manage container images in Azure Container Registry
- Run container images in Azure Container Instances

### **Implement user authentication and authorization**

- Explore the Microsoft identity platform
- Implement authentication by using the Microsoft Authentication Library
- Implement shared access signatures
- Explore Microsoft Graph

### **Implement secure cloud solutions**

- Implement Azure Key Vault
- Implement managed identities
- Implement Azure App Configuration

### **Implement API Management**

- Explore API Management

### **Develop event-based solutions**

- Explore Azure Event Grid
- Explore Azure Event Hubs

### **Develop message-based solutions**

- Discover Azure message queues

### **Instrument solutions to support monitoring and logging**

- Monitor app performance

### **Integrate caching and content delivery within solutions**

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

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Ao concluir com aproveitamento esta formação, cumprindo a percentagem mínima de 70% de assiduidade e após avaliação ao curso, o formando poderá receber o seu Certificado Microsoft de conclusão e o badge digital para partilhar com a sua rede profissional online.