

## AZ-204: Developing Solutions for Microsoft Azure

- **Formato do curso:** Presencial e Live Training
- **Localidade:** Porto
- **Data:** 22 Nov. 2021 a 26 Nov. 2021
- **Preço:** 1810€
- **Horário:** Laboral - das 09h00 às 18h00
- **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.

If you are new to Azure and cloud computing consider one of the following course:

- Instructor-led course: [AZ-900: Azure Fundamentals](#)
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## Programa

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

Learn how Azure App Service functions and how to create and update an app. Explore App Service authentication and authorization, configuring app settings, scale apps, and how to use deployment slots.

- Azure App Service core concepts
- Creating an Azure App Service Web App
- Configuring and Monitoring App Service apps
- Scaling App Service apps
- Azure App Service staging environments

### **Implement Azure functions**

Learn how to create and deploy Azure Functions. Explore hosting options, bindings, triggers, and how to use Durable Functions to define stateful workflows.

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

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

Learn how to 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.

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

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

Learn how to 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.

- Azure Cosmos DB overview
- Azure Cosmos DB data structure
- Working with Azure Cosmos DB resources and data

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

Learn how to create and deploy virtual machine, deploy resources using Azure Resource Manager templates, and manage and deploy containers.

- Provisioning 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**

Learn how to implement authentication and authorization to resources by using the Microsoft identity platform, Microsoft Authentication Library, shared access signatures, and use Microsoft Graph.

- Microsoft Identity Platform
- Authentication using the Microsoft Authentication Library
- Implement shared access signatures
- Explore Microsoft Graph

### **Implement secure cloud solutions**

Learn how to more securely deploy apps in Azure by using Azure Key Vault, managed identities, and Azure App Configuration.

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

### **Implement API Management**

Learn how the API Management service functions, how to transform and secure APIs, and how to create a backend API.

- Explore API Management

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

Learn how to build applications with event-based architectures by integrating Azure Event Grid and Azure Event Hubs in to your solution.

- Explore Azure Event Grid
- Explore Azure Event Hubs

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

Learn how to build applications with message-based architectures by integrating Azure Service Bus and Azure Queue Storage in to your solution.

- Discover Azure message queues

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

Learn how to instrument apps to enable Application Insights to monitor performance and help troubleshoot issues.

- Monitor app performance

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

Learn how to improve the performance and scalability of your applications by integrating Azure Cache for Redis and Azure Content Delivery Network in to your solution.

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