



## AI-102: Designing and Implementing a Microsoft Azure AI Solution

Microsoft - Data & AI

Live Training ( também disponível em presencial )

- **Localidade:** Porto
  - **Data:** 20 Nov 2023
  - **Preço:** 1200 € ( Os valores apresentados não incluem IVA. Oferta de IVA a particulares e estudantes. )
  - **Horário:** Laboral das 09h00 - 17h00
  - **Nível:** Intermédio
  - **Duração:** 28h
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### Sobre o curso

AI-102 Designing and Implementing an Azure AI Solution is intended for software developers wanting to build AI infused applications that leverage Azure Cognitive Services, Azure Cognitive Search, and Microsoft Bot Framework.

The course will use C# or Python as the programming language.

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### Destinatários

Software engineers concerned with building, managing and deploying AI solutions that leverage Azure Cognitive Services, Azure Cognitive Search, and Microsoft Bot Framework. They are familiar with C# or Python and have knowledge on using REST-based APIs to build computer vision, language analysis, knowledge mining, intelligent search, and conversational AI solutions on Azure.

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### Objetivos

- Prepare for Exam AI-102: Designing and Implementing a Microsoft Azure AI Solution
- Provision, secure, monitor, and deploy cognitive services resources and use them to build intelligent solutions
- Create apps that extract semantic meaning from text and translate it between languages
- Develop speech-enabled applications by using the Speech service

- Build language models for your applications
  - Build bots that can be delivered on Microsoft Azure
  - Implement text extraction solutions with images and documents using form recognizer service's OCR Test Tool, pre-built models, and custom models
  - Extract key insights from this data, and enable applications to search and analyze them
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## Pré-requisitos

Before attending this course, students must have:

- Knowledge of Microsoft Azure and ability to navigate the Azure portal
- Knowledge of either C# or Python
- Familiarity with JSON and REST programming semantics

If you are new to artificial intelligence, and want an overview of AI capabilities on Azure, consider completing the Azure AI Fundamentals course and certification before taking this one.

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## Programa

- Prepare for AI engineering
- Provision and manage Azure Cognitive Services
- Process and translate text with Azure Cognitive Services
- Process and Translate Speech with Azure Cognitive Speech Services
- Create a Language Understanding solution with Azure Cognitive Services
- Build a question answering solution
- Create conversational AI solutions
- Create computer vision solutions with Azure Cognitive Services
- Extract text from images and documents
- Implement knowledge mining with Azure Cognitive Search

### **Prepare for AI engineering**

- Prepare to develop AI solutions on Azure

### **Provision and manage Azure Cognitive Services**

- Create and consume Cognitive Services
- Secure Cognitive Services
- Monitor Cognitive Services
- Deploy cognitive services in containers

## **Process and translate text with Azure Cognitive Services**

- Extract insights from text with the Language service
- Translate text with the Translator service

## **Process and Translate Speech with Azure Cognitive Speech Services**

- Create speech-enabled apps with the Speech service
- Translate speech with the speech service

## **Create a Language Understanding solution with Azure Cognitive Services**

- Build a Language Understanding model
- Publish and use a Language Understanding app

## **Build a question answering solution**

- Build a question answering solution

## **Create conversational AI solutions**

- Create a bot with the Bot Framework SDK
- Create a Bot with the Bot Framework Composer

## **Create computer vision solutions with Azure Cognitive Services**

- Analyze images
- Analyze video
- Classify images
- Detect objects in images
- Detect, analyze, and recognize faces

## **Extract text from images and documents**

- Read Text in Images and Documents with the Computer Vision Service
- Extract data from forms with Form Recognizer

## **Implement knowledge mining with Azure Cognitive Search**

- Create an Azure Cognitive Search solution
- Create a custom skill for Azure Cognitive Search
- Create a knowledge store with Azure Cognitive Search
- Enrich a search index using Language Studio
- Implement advanced search features in Azure Cognitive Search
- Build an Azure Machine Learning custom skill for Azure Cognitive Search

- Search data outside the Azure platform in Azure Cognitive Search using Azure Data Factory
- Maintain an Azure Cognitive Search solution