



Artificial Intelligence (AI)

AI-050T00: Develop Generative AI Solutions with Azure OpenAI Service

\$595.00

- 1 Day
- Course retired by Microsoft.

Upcoming Dates

Course Description

Azure OpenAI Service provides access to OpenAI's powerful large language models such as GPT; the model behind the popular ChatGPT service. These models enable various natural language processing (NLP) solutions to understand, converse, and generate content. Users can access the service through REST APIs, SDKs, and Azure OpenAI Studio. In this course, you'll learn how to provision Azure OpenAI service, deploy models, and use them in generative AI applications.

Course Outline

Get started with Azure OpenAI Service

This module provides engineers with the skills to begin building an Azure OpenAI Service solution.

Lessons

- Access Azure OpenAI Service
- Use Azure OpenAI Studio
- Explore types of generative AI models
- Deploy generative AI models
- Use prompts to get completions from models
- Test models in Azure OpenAI Studio's playgrounds

Exercise

- Get started with Azure OpenAI Service

By the end of this module, you'll be able to:

- Create an Azure OpenAI Service resource and understand types of Azure OpenAI base models.
- Use the Azure OpenAI Studio, console, or REST API to deploy a base model and test it in the Studio's playgrounds.
- Generate completions to prompts and begin to manage model par

Build natural language solutions with Azure OpenAI Service

This module provides engineers with the skills to begin building apps that integrate with the Azure OpenAI Service.

Lessons

- Integrate Azure OpenAI into your app
- Use Azure OpenAI REST API
- Use Azure OpenAI SDK

Exercise

- Integrate Azure OpenAI into your app

By the end of this module, you'll be able to:

- Integrate Azure OpenAI into your application
- Differentiate between different endpoints available to your application
- Generate completions to prompts using the REST API and language specific SDKs

Apply prompt engineering with Azure OpenAI Service

Prompt engineering in Azure OpenAI is a technique that involves designing prompts for natural language processing models. This process improves accuracy and relevancy in responses, optimizing the performance of the model.

Lessons

- Understand prompt engineering
- Write more effective prompts
- Provide context to improve accuracy

Exercise

- Utilize prompt engineering in your application

By the end of this module, you'll be able to:

- Understand the concept of prompt engineering and its role in optimizing Azure OpenAI models' performance.
- Know how to design and optimize prompts to better utilize AI models.
- Include clear instructions, request output composition, and use contextual content to improve the quality of the model's responses.

Generate code with Azure OpenAI Service

This module shows engineers how to use the Azure OpenAI Service to generate and improve code.

Lessons

- Construct code from natural language
- Complete code and assist the development process
- Fix bugs and improve your code

Exercise

- Generate and improve code with Azure OpenAI Service

By the end of this module, you'll be able to:

- Use natural language prompts to write code
- Build unit tests and understand complex code with AI models
- Generate comments and documentation for existing code

Generate images with Azure OpenAI Service

The Azure OpenAI service includes the DALL-E model, which you can use to generate original images based on natural language prompts.

Lessons

- What is DALL-E?
- Explore DALL-E in Azure OpenAI Studio
- Use the Azure OpenAI REST API to consume DALL-E models

Exercise

- Generate images with a DALL-E model

By the end of this module, you'll be able to:

- Describe the capabilities of DALL-E in the Azure openAI service
- Use the DALL-E playground in Azure OpenAI Studio
- Use the Azure OpenAI REST interface to integrate DALL-E image generation into your apps

Use your own data with Azure OpenAI Service

Azure OpenAI on your data allows developers to use supported AI chat models that can reference specific sources of data to ground the response.

Lessons

- Understand how to use your own data
- Add your own data source
- Chat with your model using your own data

Exercise

- Use your own data with Azure OpenAI Service

By the end of this module, you'll be able to:

- Describe the capabilities of Azure OpenAI on your data
- Configure Azure OpenAI to use your own data
- Use Azure OpenAI API to generate responses based on your own data

Audience

The audience for this course includes software developers and data scientists who need to use large language models for generative AI. Some programming experience is recommended, but the course will be valuable to anyone seeking to understand how the Azure OpenAI service can be used to implement generative AI solutions.

Prerequisites

Before starting this learning path, you should already have:

- Familiarity with Azure and the Azure portal.
- Experience programming with C# or Python.

What You Will Learn