

# Build a copilot app in a day with Azure OpenAI

Course Duration: 16 hours (2 days)

**Note:** To complete the hands-on labs in this course, students require an Azure subscription that has been approved for access to the Azure OpenAI service. [Azure OpenAI: https://learn.microsoft.com/legal/cognitive-services/openai/limited-access](https://learn.microsoft.com/legal/cognitive-services/openai/limited-access)

Pre-requisites:

- Familiarity with Azure and the Azure portal.
- Experience programming with C# or Python.
- Python Check: <https://learn.microsoft.com/en-us/training/paths/beginner-python/>
- C# Check: <https://learn.microsoft.com/en-us/training/paths/get-started-c-sharp-part-1/>

## Module 01: Introduction to Azure OpenAI

- Azure OpenAI's language, code, and image capabilities
- Azure OpenAI's responsible AI practices and limited access policies
- Types of Azure OpenAI's base model and its deployment
- Lab: Creation of Azure OpenAI resource/OpenAI & accessing Playground

## Module 02: Chat Copilot using Azure OpenAI Studio

- Brief of Azure Storage Account, Azure Cognitive Search, App Services & App Service Plans
- Basic workflow for Copilot Creation
- Lab: Build your own Chat Copilot using various Azure Services (Azure Portal)

## Module 03: Art of Effective Prompting Techniques

- Understanding Text Prompting
- Iterative Techniques for Text Prompting
- Using Summarization Techniques
- Inference Techniques in Text Prompting
- Transformation Techniques for Text
- Exercise/Documentation: Effective Prompting Techniques (Jupyter notebook)

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## Module 04: Prompt Flow Design using Azure Machine Learning Studio

- Introduction to Azure Machine Learning Studio
- Introduction to Prompt flow
- Lab: Prompt flow design and implementation

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## Module 05: Introduction to Semantic Kernel

- Introduction to Semantic Kernel
  - Working and Components of Semantic Kernel
  - Concept of Chat Plugin & its Integration into Applications
  - Integrating Semantic Kernel with Azure OpenAI models
  - Introduction to Autogen in Semantic Kernel
  - Native Functions
  - Chaining Functions using Azure OpenAI
    - Lab: Basic Labs on Semantic Functions
    - Lab: Adding skillsets to Semantic Kernel
    - Lab: Adding memories to Semantic Kernel
    - Lab: Using connectors in Semantic Kernel
    - Lab: Chaining concept in Semantic Kernel
    - Lab: Integrating Bing with Azure OpenAI using Semantic Kernel
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