



Course Title: AI-3026: Develop AI agents on Azure [Cloud Slice Provided]	Course Duration: 1.0 Day
Exam: Not Included	Exam Type: Proctored Exam
Qualification: Microsoft Applied Skills: Build and Deploy Generative AI Solutions Using Azure OpenAI Service	

Course Syllabus

1 - Get started with AI agent development on Azure

- What are AI agents?
- Options for agent development
- Azure AI Agent Service
- Module assessment

2 - Develop an AI agent with Azure AI Agent Service

- What is an AI agent
- How to use Azure AI Agent Service
- Develop agents with the Azure AI Agent Service
- Module assessment

3 - Integrate custom tools into your agent

- Why use custom tools
- Options for implementing custom tools
- How to integrate custom tools
- Module assessment

4 - Develop an AI agent with Semantic Kernel

- Understand Semantic Kernel AI agents
- Create an Azure AI agent with Semantic Kernel
- Add plugins to Azure AI agent

5 - Orchestrate a multi-agent solution using Semantic Kernel

- Understand the Semantic Kernel Agent Framework
- Create an agent group chat
- Design an agent selection strategy
- Define a chat termination strategy



Course Overview

This course provides hands-on experience in building and deploying generative AI solutions using Azure OpenAI Service. Learners will explore how to provision Azure OpenAI resources, design effective prompts, integrate models into applications, and apply security and responsible AI practices for enterprise environments.

Course Learning Outcomes

By the end of this course, learners will be able to provision and configure Azure OpenAI Service, design and optimize prompts for text and chat-based generative AI solutions, integrate Azure OpenAI models into applications using APIs, manage data grounding and content filtering, apply security, privacy, and responsible AI principles, and deploy scalable generative AI solutions within Azure environments. These capabilities enable learners to build production-ready AI solutions aligned with organizational and compliance requirements.

Audience

Developers, AI engineers, solution architects, data professionals, and IT staff responsible for building or integrating generative AI solutions

Entry-Level Requirements

Basic knowledge of Azure, familiarity with REST APIs, and foundational understanding of AI or machine learning concepts

Recommended Reading

Microsoft Learn: Azure OpenAI Service Documentation

What's Included

Instructor-led training, course materials

Exam Information

This course prepares learners for the Microsoft Applied Skills assessment: Build and Deploy Generative AI Solutions Using Azure OpenAI Service (AI-3026). The assessment is hands-on and performance-based, requiring candidates to complete real-world tasks in a live Azure environment. Learners are evaluated on their ability to configure Azure OpenAI resources, implement prompt engineering techniques, integrate generative AI models into applications, apply content safety controls, and deploy secure and scalable solutions. Successful completion validates practical, job-ready skills in generative AI development on Azure

What's Next



After completing this course, learners can progress to advanced Azure AI engineering, Copilot and Azure OpenAI integrations, or pursue Azure AI Engineer and Power Platform AI-focused certifications.

Additional Information

Generative Artificial Intelligence (AI) is becoming more functional and accessible, and AI agents are a key component of this evolution. This learning path will help you understand the AI agents, including when to use them and how to build them, using Azure AI Agent Service and Semantic Kernel Agent Framework. By the end of this learning path, you will have the skills needed to develop AI agents on Azure.