

AI-103T00: Develop AI apps and agents on Azure

Course Overview

This course is intended for software developers wanting to build AI infused applications that leverage Microsoft Foundry. Topics in this course include developing generative AI apps, building AI agents, and solutions that implement knowledge connections or tools in your agentic applications. This course also covers multimodal capabilities and understanding of complex content.

Audience Profile

This course was designed for software engineers concerned with building, managing and deploying AI solutions that leverage Microsoft Foundry. They are familiar with Python and have knowledge on using APIs and SDKs to build agents and generative AI solutions on Azure.

Course Agenda

Module 1: Develop generative AI apps in Azure

- Plan and prepare to develop AI solutions on Azure
- Select, deploy, and evaluate Microsoft Foundry models
- Develop a generative AI chat app with Microsoft Foundry
- Develop generative AI apps that use tools
- Optimize generative AI model performance with Microsoft Foundry
- Implement a responsible generative AI solution in Microsoft Foundry

Module 2: Developing Azure AI Apps and Agents

- Integrate custom tools into your agent
- Integrate MCP Tools with Azure AI Agents
- Build knowledge-enhanced AI agents with Foundry IQ
- Integrate your agent with Microsoft 365
- Build agent-driven workflows using Microsoft Foundry
- Develop an AI agent with Microsoft Agent Framework
- Orchestrate a multi-agent solution using the Microsoft Agent Framework

Module 3: Develop natural language solutions in Azure

- Analyze text with Azure Language in Foundry Tools
- Develop a text analysis agent with the Azure Language MCP server
- Develop a speech-capable generative AI application

- Create speech-enabled apps with Microsoft Foundry
- Develop a speech agent with the Azure Speech MCP server
- Develop an Azure Speech Voice Live Agent in Microsoft Foundry
- Translate text and speech with Microsoft Foundry Tools

Module 4: Extract insights from visual data in Azure

- Develop a vision-enabled generative AI application
- Generating images and video
- Analyze images with Content Understanding
- Analyze documents with Content Understanding
- Create a knowledge mining solution with Azure AI Search