

# AGENTIC AI ON AZURE: BUILD, DEPLOY, AND SCALE INTELLIGENT AGENTS IN THE ENTERPRISE

## DURATION

**Format** Instructor-Led Training  
(ILT or Instructed-Led  
Online (ILO))

**Duration** 3 days

---

## PDU

This course will contribute 8 PMI® professional development units (PDUs) towards your chosen certification.

---

## INTENDED FOR

- Solution architects exploring how to integrate agents into enterprise systems
- Developers & MLOps engineers building with Azure AI and OpenAI APIs
- IT and innovation leaders designing intelligent automation across business functions
- Product teams prototyping AI-driven assistants, copilots, or workflow tools

The next generation of software is agentic. These AI agents don't just respond — they plan, reason, act, and adapt. From copilots to autonomous systems, enterprises are rearchitecting workflows around agents. In this hands-on course, you'll go beyond theory. You'll build fully functional AI agents using Azure AI Studio and Azure OpenAI — and deploy them using enterprise-grade tools. Whether you're a developer, architect, or tech leader, this course gives you the blueprint to lead the agentic shift in your org.

## LEARNING OUTCOMES

- Understand the architecture and lifecycle of AI agents — from prompt to plan to action
- Leverage Azure AI Studio + Azure OpenAI to create powerful multi-step agents
- Use prebuilt models (GPT-4, Embeddings, Cognitive Services) and build your own
- Deploy, monitor, and scale agent workflows in the cloud
- Integrate agents with enterprise APIs, tools, and memory systems
- You will walk away with:
  - A functioning AI agent running in Azure
  - A downloadable AI agent blueprint for reuse in your org
  - A digital badge for completing the course
  - Confidence to lead Agentic AI initiatives at work

# AGENTIC AI ON AZURE: BUILD, DEPLOY, AND SCALE INTELLIGENT AGENTS IN THE ENTERPRISE

## PREREQUISITES

- Access to an Azure subscription (free or paid)
- Familiarity with Azure services and cloud concepts
- A high-level understanding of generative AI and LLMs
- (Optional but helpful) Experience with Python or C#
- Microsoft Azure Fundamentals (AZ-900)
- Microsoft AI Fundamentals (AI-900)

## CONTENT

### Module 1: What Is an AI Agent in Azure?

Understand the fundamentals of AI agents and Azure's ecosystem

- Overview of agent architecture and capabilities
- Agentic vs traditional automation: key differences
- Introduction to Azure OpenAI & model capabilities (GPT-4, vision, embeddings)
- Demo: Agent behavior in the Azure Playground
- Limits, quotas, and pricing considerations
- Q&A + Discussion

*Lecturing is kept to the minimum necessary, and most of the learning is achieved by applying the practices and techniques in group exercises. Our LiveOnline delivery features an instructor who is 100% live, and interaction and learning objectives are the same as our in-person classes, with the added benefit of taking this course from your home or office. Since this class is delivered over half-days, it allows for greater flexibility and time for other work or activities.*

### Module 2: Agent Development with Azure AI Studio

Hands-on with Azure's flagship tool for agent workflows

- Introduction to Azure AI Studio (aka AI Foundry)
- Building agents with planning, memory, and tools
- Using prompts, APIs, functions, and data connectors
- Demo: Creating a workflow-aware agent project
- Q&A + Demo Extension

### Module 3: Coding and Deploying AI Agents

From concept to cloud — deploy your agents

- Code walkthroughs in C# and Python
- Calling agents via REST and SDKs
- Deploying and testing agents in the Azure cloud
- Monitoring usage, performance, and safety
- Break + Q&A

### Module 4: Integrating Agents into Real Workflows

Bring agents to life in real-world use cases

- Customer support and ticketing systems
- Finance and risk agents
- Healthcare process automation
- Manufacturing workflow optimization
- Demo: Connecting to enterprise APIs and tools
- Wrap-up Q&A and feedback