

MS-4014: Introduction to building AI agents

Course Description

Curious about building AI agents but not sure where to start? Introduction to building AI agents is a practical introduction to how AI agents work, what tools and services Microsoft offers for building them, and how to plan an agent solution before you start building. You'll explore what agents are and the business value they unlock, tour Microsoft's agent platform — including Copilot Studio, Microsoft Foundry, and the Microsoft 365 Agents Toolkit — and learn how to choose the right development approach, channels, grounding services, integrations, and governance posture for your scenario. After completing this course, you'll be prepared to translate a business problem into a complete agent design and development plan.

Course Duration

1 day

Course Prerequisites

Students should have basic functional experience with Microsoft 365 services.

Course Outline

1 - Introduction to developing AI agents

- AI transformation and agents
- AI agent use cases
- AI agent components
- Module assessment

2 - Introduction to Microsoft AI agent solutions

- The Microsoft AI agent ecosystem
- Maximize Microsoft 365 Copilot, Copilot Chat, and agents
- Customize and extend Microsoft 365 Copilot
- Build custom AI agents and applications
- Compare AI agent solutions
- Module assessment

3 - Choose the best Microsoft 365 Copilot extensibility path for your scenario

- Identify extensibility options
- Analyze the decision criteria
- Extend Copilot's knowledge with Copilot connectors
- Build declarative agents in Copilot Studio
- Build declarative agents with Visual Studio Code and Microsoft 365 Agents Toolkit
- Deploy custom agents to Microsoft 365 Copilot
- Module assessment

4 - Choose a custom AI agent development path

- Identify custom AI agent development options
- Analyze decision criteria
- Build custom agents with Copilot Studio
- Build custom engine agents for Microsoft Teams

- Build multi-channel agent solutions with the Microsoft 365 Agents SDK
- Build scalable, enterprise-grade generative AI solutions on Azure
- Module assessment

Who Should Attend

Introduction to building AI agents is designed for builders and developers who want to build AI agents on Microsoft's agent platform. It's ideal for learners who are new to agent development or evaluating Microsoft's options, and who want to understand how to choose the right tools, ground and connect agents to their data and systems, and plan an agent solution end to end. Learners come from both low-code and pro-code backgrounds; no prior agent development experience is required.