

AB-620T00: Design and Build Integrated AI Agent Solutions in Copilot Studio

Duration: 3 Days (24 Hours)

Level: Intermediate

Certification: Microsoft Certified: AI Agent Builder Associate (Exam AB-620)

Course Overview

This 3-day intermediate course equips advanced builders and professional developers with the skills to design, build, and manage production-ready AI agent solutions using Microsoft Copilot Studio. Participants will go beyond standalone agent creation to deliver enterprise-grade, end-to-end solutions that automate real business processes, connect to enterprise data sources, and operate reliably at scale. Across three focused learning paths, the course covers designing rich conversational agent behavior using topics and Adaptive Cards, building and orchestrating multi-agent solutions using child and connected agents, and integrating agents with enterprise systems via connectors, REST APIs, Azure AI Search, and Model Context Protocol (MCP). Best practices for security, governance, responsible AI, and solution lifecycle management are applied throughout.

Pre-requisites

- Hands-on experience building and publishing agents in Microsoft Copilot Studio
- Intermediate understanding of generative AI concepts — including RAG, MCP, and Agent2Agent (A2A) protocol
- Proficiency with REST APIs and integration patterns
- Familiarity with Power Fx, Microsoft Dataverse, Power Platform environments, Microsoft 365 Copilot, and Microsoft Foundry
- Experience with prompt engineering and configuring agents with knowledge sources, instructions, tools, and topics

Course Agenda

Learning Path 1: Design Agent Conversations and Responses Using Topics in Microsoft Copilot Studio

Module 1: Deliver rich agent responses using Adaptive Cards in Microsoft Copilot Studio

- Configure message formatting in agent topics
- Design informational Adaptive Cards for agent responses
- Collect user input with interactive Adaptive Cards
- Apply channel-specific considerations for Adaptive Cards

Module 2: Take action from agent conversations using topics and tools in Microsoft Copilot Studio

- Call tools from agent topics
- Call agent flows from agent topics
- Retrieve and send data using the HTTP request node

Module 3: Generate AI-powered agent responses using generative answers in Microsoft Copilot Studio

- Configure the generative answers node in a topic
- Connect custom knowledge sources to a generative answers node
- Shape AI responses with custom instructions
- Author and configure custom prompts in topics

Learning Path 2: Design and Build Multi-Agent Solutions in Microsoft Copilot Studio

Module 4: Design multi-agent solutions in Microsoft Copilot Studio

- Understand multi-agent architectures in Copilot Studio
- Design multi-agent solutions using child agents
- Design multi-agent solutions using connected agents

Module 5: Delegate agent tasks using child agents in Copilot Studio

- Understand child agents in Copilot Studio
- Create and configure a child agent
- Configure child agent inputs, outputs, and trigger behavior
- Test and manage child agents

Module 6: Build multi-agent solutions using connected agents in Copilot Studio

- Understand connected agents in Copilot Studio
- Connect an existing Copilot Studio agent
- Connect a Microsoft Foundry agent
- Connect a Microsoft Fabric Data agent
- Manage and test your connected agent solution

Learning Path 3: Integrate Agents with Enterprise Systems in Microsoft Copilot Studio

Module 7: Design integration strategies for agents in Microsoft Copilot Studio

- Explore the Copilot Studio integration landscape
- Compare action integration patterns
- Authenticate and govern agent integrations
- Select integration patterns for enterprise scenarios

Module 8: Take action in external systems using connector and REST API agent tools in Microsoft Copilot Studio

- Understand connector and REST API tools in Copilot Studio
- Add prebuilt and custom connector tools to an agent
- Configure authentication for connector tools
- Add a REST API tool using an OpenAPI specification

Module 9: Ground agents with enterprise knowledge using connectors and Azure AI Search in Microsoft Copilot Studio

- Choose between Copilot connector and Power Platform connector knowledge sources
- Add Copilot connectors as knowledge sources
- Configure Power Platform connectors as real-time knowledge sources
- Connect an agent to Azure AI Search

Module 10: Integrate agents with external systems via MCP in Microsoft Copilot Studio

- Understand MCP and its role in Copilot Studio integration
- Connect an agent to an existing MCP server
- Configure authentication for MCP server connections
- Enable and manage MCP tools on an agent