

ARTIFICIAL INTELLIGENCE

INTERMEDIATE

3 DAYS

Building Agents with Microsoft Copilot Studio

Build working agents on the Microsoft stack, from a simple declarative agent in Copilot Chat through to orchestrated multi-agent solutions in Copilot Studio. Covers knowledge grounding, tools, agent flows, autonomous triggers, enterprise integration and the lifecycle discipline that keeps agents maintainable.

Why Build Agents with Copilot Studio?

Low-code, real outcomes

Business builders and developers work in the same platform on genuinely useful automation.

Beyond the demo agent

Covers testing, deployment and lifecycle so agents survive past the pilot.

Grounded in your data

Connect agents to SharePoint, Dataverse and line-of-business systems, not generic answers.

Governed by design

Security, permissions and responsible design built in from the first agent, not retrofitted.

What you'll be able to do

- ✓ Distinguish declarative agents, custom engine agents and autonomous agents, and choose between them
- ✓ Build a conversational agent using topics, nodes, entities and variables
- ✓ Ground agents in enterprise knowledge sources and control answer quality
- ✓ Extend agents with tools, connectors, custom prompts and agent flows
- ✓ Configure generative orchestration and autonomous triggers safely
- ✓ Design multi-agent solutions that span systems and hand off cleanly
- ✓ Test, deploy and manage agents across environments using ALM practice
- ✓ Apply security, permissions and responsible AI practice to agent design

Who this is for

- Power Platform makers and citizen developers
- Professional developers extending Microsoft 365
- Solution architects and business analysts
- IT teams supporting agent build requests from the business

Curriculum

01 The Microsoft Agent Landscape

- Declarative agents, custom engine agents and autonomous agents compared
- Where Copilot Chat, Copilot Studio and the wider platform each fit
- Choosing the lightest option that solves the problem
- Licensing, capacity and consumption basics before you start building
- **Hands-on:** build a declarative agent in Copilot Chat in under an hour

02 First Agent: Topics, Nodes and Variables

- Creating an agent from natural language description or from scratch
- Topics as units of conversation, and how the system routes between them
- Message and question nodes, conditions and branching
- Entities for extracting structured information from user input
- Variables for capturing and carrying state through a conversation
- **Hands-on:** build and test a working support agent

03 Grounding Agents in Knowledge

- Knowledge sources: SharePoint, Dataverse, public websites and uploaded files
- How grounding changes answer quality, and where it still fails
- Respecting existing permissions so agents cannot overshare
- Tuning retrieval and diagnosing wrong or incomplete answers
- **Hands-on:** ground an agent in real organisational content

04 Tools, Connectors and Agent Flows

- Tools and the difference between the available tool types
- Connectors for line-of-business systems and third-party services
- Custom prompts as reusable reasoning steps
- Agent flows for deterministic, auditable automation
- Passing data between Copilot Studio and Power Automate
- **Hands-on:** execute a real transaction through an agent flow

05 Generative Orchestration and Autonomous Triggers

- How generative orchestration selects tools and plans a response
- When to use orchestration and when deterministic topics are safer
- Autonomous triggers: agents that act on events rather than prompts
- Approval steps, human-in-the-loop and stop conditions
- **Hands-on:** configure an autonomous agent with appropriate guardrails

06 Multi-Agent Solutions and Enterprise Integration

- Decomposing a business process across multiple specialised agents
- Agent-to-agent handoff and shared context
- Integrating with Dataverse, Microsoft Foundry and external APIs
- Escalation to human channels and service desk handover
- Designing for failure: what happens when a downstream system is unavailable

07 Testing, Deployment and Lifecycle Management

- Test sessions, tracing and diagnosing agent behaviour
- Environments, solutions and moving agents between them
- Application lifecycle management practice for agents
- Monitoring, analytics and identifying degradation over time
- Versioning, change control and safely retiring an agent

08 Security, Governance and Responsible Design

- Authentication options and what the agent can act on behalf of
- Data loss prevention policies and environment-level controls
- Preventing prompt injection and unintended data disclosure
- Responsible AI practice: transparency, disclosure and scope limits
- Preparing agents for organisation-wide governance and review