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Sign Up

Microsoft AI Agent Builder Associate (AB-620) Certification Training

3 days (21 hours)

Overview

The Microsoft AI Agent Builder Associate Certification Training (AB-620) prepares you to design, integrate, and deploy robust AI agents using Microsoft Copilot Studio, Power Platform, and Microsoft cloud services

This intermediate-level course helps you prepare for the official Microsoft Certified: AI Agent Builder Associate (AB-620) certification. You'll deepen your understanding of the skills assessed on the exam, from planning an agent-based solution through to its integration, testing, and operational management

You'll learn to design advanced conversations, configure topics, generative knowledge, agent flows, adaptive maps, and error-handling mechanisms. You'll also learn to define a strategy for security, identity, governance, and responsible AI

The course covers the integration of agents with enterprise knowledge sources, REST APIs, custom connectors, Azure AI Search, MCP servers, Microsoft Foundry, and multi-agent solutions based on the A2A protocol

Upon completion of the training, you will be able to approach the exam systematically, complete practical exercises that closely resemble certification scenarios, and build agents ready for enterprise use—supervised, tested, and integrated into a controlled deployment cycle

Like all our training courses, this one will introduce you to **the latest stable version** of the technology and its new features.

Objectives

- Plan an agent-based solution tailored to business needs, security, and governance
- Configure advanced agents using Microsoft Copilot Studio, topics, tools, and flows
- Integrate knowledge, connectors, REST APIs, and Azure services
- Design multi-agent architectures using Microsoft Foundry and the A2A protocol
- Test, monitor, and scale agents using ALM and Application Insights
- Effectively prepare for the Microsoft Certified: AI Agent Builder Associate (AB-620) exam

Target Audience

- Microsoft Power Platform Developer
- Business application developers
- Microsoft 365 Consultant
- App Maker
- AI Solutions Architect

Prerequisites

- Hands-on experience creating agents with Microsoft Copilot Studio
- Intermediate knowledge of generative AI, prompt engineering, and RAG
- Proficiency in Microsoft Power Platform concepts, environments, and solutions
- Experience using REST APIs and integration patterns
- Familiarity with Power Fx, Microsoft Dataverse, and Microsoft Foundry

Technical Prerequisites

- PC running Windows 11 or macOS with at least 8 GB of RAM
- A recent version of Microsoft Edge or Google Chrome
- Stable internet connection without filtering that blocks Microsoft 365 and Azure services
- Personal or work Microsoft account authorized to access Microsoft Copilot Studio
- Access to a Power Platform environment with the necessary creation permissions

Course Outline for Our Microsoft AI Agent Builder Associate (AB-620) Training

[Day 1 - Morning]

Fundamentals and Architecture of AI Agents

- Overview of the Microsoft Certified: AI Agent Builder Associate (AB-620) certification and analysis of the assessed competency areas
- Review of AI agents, generative models, orchestration, RAG, MCP protocols, and A2A

- Architecting a solution with Microsoft Copilot Studio, Power Platform, Microsoft Foundry, and enterprise services
- Planning for audiences, channels, identities, reusable components, security, governance, and Responsible AI
- Hands-on workshop: Designing the architecture and deployment plan for an internal HR support agent.

[Day 1 - Afternoon]

Conversations, topics, and automation

- Configuring instructions, basic knowledge, tools, and agent behaviors in Microsoft Copilot Studio
- Designing topics, managing triggers, variables, conversational branches, and response formats
- Using generative responses, custom prompts, advanced knowledge, and HTTP requests
- Creating agent flows, input and output parameters, human validation, and errors
- Hands-on workshop: Building an HR request agent with a topic, approval workflow, and adaptive map.

[Day 2 - Morning]

Enterprise Knowledge and Extensions

- Selecting and configuring enterprise knowledge sources, Microsoft Copilot connectors, and Power Platform connectors
- Implementing RAG with Azure AI Search and response relevance principles
- Adding tools using custom connectors, REST APIs, and secure HTTP requests
- Connecting an agent to MCP tools and monitoring access, inputs, outputs, and integration errors
- Hands-on workshop: Connecting an agent to a business API and a document repository indexed in Azure AI Search.

[Day 2 - Afternoon]

Multi-agent collaboration and Azure services

- Design principles for a multi-agent solution, division of responsibilities, and orchestration of interactions
- Integrating existing agents into Microsoft Copilot Studio and agents created with Microsoft Foundry
- Using a Microsoft Fabric data agent and collaboration scenarios with the A2A protocol

- Configuring Prompts Using the Microsoft Foundry Template Catalog and Introduction to Computer Use
- Hands-on workshop: Building a multi-agent solution that combines request qualification, document search, and business actions.

[Day 3 - Morning]

Testing, monitoring, and lifecycle

- Building test suites, selecting evaluation methods, and interpreting an agent's performance results
- Diagnosing inaccurate responses, tool failures, workflow errors, and security issues
- Monitoring agents and workflows with Application Insights, tracing, and incident analysis
- Implementing ALM, Power Platform solutions, environment variables, and deployment pipelines
- Hands-on workshop: Create a test suite, analyze the results, and prepare for the controlled deployment of an agent.

[Day 3 - Afternoon]

Targeted review and exam preparation

- Review of exam objectives, preparation priorities, and the alignment between use cases and assessed competencies
- Analysis of certification scenarios covering planning, integrations, tools, knowledge, and governance
- Preparation for multiple-choice questions, case studies, and interactive components, including time management and answering strategies
- Strategic use of Microsoft Learn during the exam and identification of common technical pitfalls
- Hands-on workshop: conduct a simulation of the AB-620 certification exam, review answers, and create a personalized study plan.

Target Audience

This training is intended for both individuals and companies—large or small—seeking to train their teams in new, advanced IT technologies or to acquire specific industry knowledge or modern methodologies.

Pre-training Assessment

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency level across various types of technologies, as well as their expectations and personal goals for the upcoming training, within the limits imposed by the selected format. This

questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could pose problems for the monitoring and smooth running of the training session.

Teaching Methods

Hands-On Course: 60% Hands-On, 40% Theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the instructor—supported by examples and reflection sessions—and group work.

Assessment

At the end of the session, a multiple-choice quiz is administered to verify that participants have successfully acquired the skills.

Certification

A certificate will be issued to each trainee who has completed the entire training program.