

AB-100T00: ARCHITECTING AGENTIC AI BUSINESS SOLUTIONS



DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
3 Days	Advanced	Microsoft 365	Instructor-led / VILT	N/A

INTRODUCTION

Architecting agentic AI business solutions is an advanced course for architects, senior consultants, and technical leaders responsible for planning, designing, and governing AI-powered enterprise solutions built on Microsoft platforms. This course serves as a foundational, real-world, and architectural preparation step that builds the design judgment, strategic reasoning, and end-to-end understanding learners need before pursuing the AB-100 exam or implementing agentic AI solutions at scale. Learners will explore how to architect AI-powered business solutions that use agents, copilots, and generative AI to automate tasks, improve decision-making, and enhance employee and customer experiences. Emphasis is placed on architecture, trade-offs, governance, cost/benefit analysis, and lifecycle management, rather than step-by-step configuration.

AUDIENCE PROFILE

This course is intended for experienced technology professionals who are responsible for planning, designing, and guiding AI-powered business solutions using Microsoft platforms. This course assumes familiarity with Microsoft business applications, cloud concepts, and solution architecture fundamentals. It is best suited for learners who want to deepen their architectural judgment, design decision-making, and enterprise readiness for agentic AI solutions—rather than those seeking step-by-step configuration guidance or exam preparation. **Important Note:** While this course aligns conceptually with many of the AB-100 exam skill areas, it is not a test-preparation course and does not focus on test-taking strategies. Instead, it provides the architectural foundations, enterprise context, and design reasoning that make AB-100 learning meaningful and applicable. For many learners, this course serves as a recommended preparatory step before beginning focused AB-100 exam study.

The ideal audience includes:

- Solution Architects and Enterprise Architects designing intelligent and agent-based business solutions
- Senior Functional and Technical Consultants working with Dynamics 365, Microsoft 365, Power Platform, or Azure AI services
- AI and Digital Transformation Leads defining AI strategy, governance, and adoption across the organization
- Application Architects and Technical Leads integrating agents, copilots, and generative AI into enterprise workloads
- Experienced practitioners preparing to advance toward formal AI solution validation, seeking architectural depth rather than exam-focused instruction

PREREQUISITES

- Students should have basic functional experience with Microsoft 365 services.
- Students must have a proficient understanding of general IT practices.
- Basic understanding of AI concepts.
- Familiarity with enterprise IT environments.
- Awareness of business strategy and organizational goals.

COURSE OBJECTIVES

After completing this course, students will be able to:

- Design and implement AI-powered business solutions using agents, generative AI, and Microsoft Copilot.
- Analyse requirements and create innovative solutions that enhance productivity and efficiency.

COURSE CONTENT

Module 1: Introduction to agentic AI business solutions

Learn to align AI solutions with business goals and scale AI adoption using Microsoft technologies.

Lessons:

- Introduction
- Drive AI transformation with architect strategies
- Explore Microsoft AI technologies for business
- Identify Microsoft AI technologies for business solutions
- Identify out-of-box Microsoft AI agent resources for business solutions
- Identify out-of-box Microsoft AI agents for business
- Module assessment

After completing this module, students will be able to:

- Explain the architect's role in driving AI adoption and transformation.
- Identify key responsibilities of an AI architect in business contexts.
- Understand how architects align AI solutions with organizational goals.
- Apply best practices for scaling AI across enterprise environments.
- Identify core Microsoft AI services and tools.
- Explore Microsoft Copilot solutions and their business value.
- Understand how generative AI unlocks productivity in enterprise environments.
- Identify OOB Microsoft AI agent resources available for business solutions.

Module 2: Analyze requirements for AI-powered business solutions

Learn to analyze, design, and implement AI-powered business solutions using agents, generative AI, and Microsoft Copilot for productivity.

Lessons:

- Introduction
- Assess the use of agents in task automation, data analytics, and decision-making
- Review data for grounding accuracy, relevance, timeliness, cleanliness, and availability
- Organize business solution data for AI systems
- Module assessment

Summary

After completing this module, students will be able to:

- Explain how AI agents support task automation, data analytics, and decision-making.
- Describe the role of Microsoft Copilot and generative AI in enhancing productivity.
- Assess scenarios where AI agents add measurable value to enterprise environments.
- Evaluate grounding data quality across accuracy, relevance, timeliness, cleanliness, and availability.
- Organize business solution data for AI readiness and scalable consumption.

Module 3: Evaluate costs and benefits of AI solutions

Learn to assess costs, benefits, and ROI of AI solutions while deciding whether to build, buy, or extend AI components for business processes.

Lessons:

- Introduction
- Evaluate ROI criteria for AI-powered solutions
- Create ROI analysis for a proposed AI solution
- Analyze whether to build, buy, or extend AI components
- Implement a model router to intelligently route requests to the most suitable model
- Module assessment
- Summary

After completing this module, students will be able to:

- Define ROI criteria and evaluate total cost of ownership (TCO) for AI solutions.
- Create a comprehensive ROI analysis for AI-powered business processes.
- Analyze and decide whether to build, buy, or extend AI components.
- Implement model routing strategies to optimize AI performance and cost.

Module 4: Manage testing AI-powered business solutions

Learn to validate and maintain AI-powered business solutions with structured testing frameworks, metrics, and governance.

Lessons:

- Introduction

- Recommend process metrics for testing AI agents
- Create validation criteria for custom AI models
- Validate effective Copilot prompt best practices
- Design end-to-end test scenarios for AI solutions using multiple Dynamics 365 apps
- Build a strategy for creating test cases using Copilot
- Module assessment
- Summary

After completing this module, students will be able to:

- Design structured testing processes for AI agents, custom models, and multi-application scenarios.
- Define measurable validation criteria for performance, safety, and compliance.
- Implement scalable testing strategies using Copilot for consistency and coverage.
- Ensure AI solutions align with enterprise goals and remain trustworthy throughout their lifecycle.

Module 5: Design extensibility of AI solutions

Learn to design scalable, secure, and customizable AI solutions using Microsoft platforms.

Lessons:

- Introduction
- Design AI solutions with custom models in Microsoft Foundry
- Design agents in Microsoft 365 Copilot
- Design extensible agents in Microsoft Copilot Studio
- Design extensible agents using MCP in Copilot Studio
- Design agents to automate tasks in apps and websites with Computer Use in Copilot Studio
- Design agent behaviors in Copilot Studio
- Optimize solution design for agents in Microsoft 365
- Module assessment
- Summary

After completing this module, you will be able to:

- Design scalable and secure AI solutions using Microsoft platforms.
- Leverage custom models in Microsoft Foundry.

- Design and operationalize agents in Microsoft 365 Copilot.
- Extend agent capabilities using Copilot Studio and Model Context Protocol (MCP).
- Apply governance and lifecycle management for AI solutions.

Module 6: Design responsible AI security, governance, risk management, and compliance

Learn to design secure, governed, and compliant AI systems that align with organizational policies and Responsible AI principles.

Lessons

- Introduction

- Design security agents for Microsoft clouds
- Design governance models for AI agents
- Design model security for responsible AI
- Analyze AI vulnerabilities and mitigations for prompt manipulation
- Review solution adherence to Responsible AI principles
- Validate data residency and movement compliance
- Design access controls for grounding data and model tuning
- Design audit trails for changes to models and data
- Module assessment
- Summary

After completing this module, you will be able to:

- Design AI systems that balance innovation with accountability.
- Apply identity, access control, and data governance to secure AI agents.
- Implement observability and threat protection for AI solutions.
- Translate compliance requirements into technical controls.
- Mitigate vulnerabilities across prompts, models, and workflows.

ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the Microsoft AB-100: Agentic AI Business Solutions Architect Exam.