



Azure AI Fundamentals: Module 1.1: What AI-901 Actually Tests

AI-901 now tests understanding and lightweight implementation

Before April 2026

- Broad survey of Azure AI services
- Primarily conceptual
- Several separate workload domains

After April 2026

- Two consolidated exam domains
- Microsoft Foundry at the center
- Python and client application concepts matter
- Generative and agentic AI receive greater emphasis

Two domains cover the entire exam

Domain	Weight	Main question
Identify AI concepts and capabilities	40–45%	What kind of AI capability fits this need?
Implement AI solutions using Microsoft Foundry	55–60%	How would you create or use the solution?



Published ranges (not an exact question count): 40–45% concepts · 55–60% implementation

Bottom line

More than half of the exam concerns implementation using Microsoft Foundry.

What “Fundamentals” means now

You should be able to

- Explain what an AI capability does
- Choose an appropriate model or service
- Recognize the main steps in a Foundry workflow
- Interpret a short implementation example
- Identify the correct tool, endpoint, or configuration
- Apply responsible AI principles to a scenario

You do not need to

- Train foundation models from scratch
- Derive machine learning algorithms
- Design production infrastructure
- Write a complete application during the exam

Two levels of knowledge

Conceptual knowledge

Explain what grounding does

Recognize speech synthesis

Describe an AI agent

Explain transparency

Recognize information extraction

Implementation knowledge

Select grounding for an answer that must use company data

Choose the capability that returns spoken audio

Identify the components needed for a single-agent solution

Choose a design that communicates AI use and limitations

Select Content Understanding for documents, images, audio, or video

Key distinction

Concept questions ask what something means. Implementation questions ask how it fits into a working solution.

Familiarity, not mastery

Technology	Expected familiarity
Python	Read basic syntax, variables, function calls, objects, and returned values
Azure resources	Understand resources, deployments, endpoints, keys, and authentication context
REST APIs	Recognize requests, endpoints, headers, payloads, and responses
SDKs	Understand how an application creates a client and calls a service
CLIs	Recognize command-based resource or deployment operations

The exam can ask which code, command, or API pattern correctly performs a task.

Definitions tell you what

Scenarios ask you to choose

Definition question

“Which AI workload converts spoken language into text?”

Tests direct recall of a capability.

Scenario question

“A call center needs searchable transcripts of recorded conversations. Which capability should the team use?”

Tests whether you can:

- Identify the required output
- Ignore irrelevant details
- Match the requirement to a capability
- Distinguish it from plausible alternatives

For every topic in this course, learn three things: what the capability does, when to use it, and how Microsoft Foundry exposes it.