

AI-901T00: Introduction to AI in Azure

Course Description

This course introduces fundamental concepts related to artificial intelligence (AI), and the services in Microsoft Azure that can be used to create AI solutions. It teaches a mix of AI concepts and technology skills that are considered foundational to a successful career implementing AI solutions on Microsoft Azure.

Course Duration

1 day

Prerequisites

There are no required prerequisites. Success in this course is supported by:

- Experience using computers and the internet
- Interest in AI workloads and applications
- A basic understanding of math (interpreting charts, simple probability)
- Familiarity with fundamental programming concepts (helpful but not required)

Course Outline

- 1 - Introduction to AI concepts
 - Generative AI and agents
 - Text and natural language
 - Speech
 - Computer vision
 - Information extraction
 - Responsible AI
 - Module assessment
- 2 - Introduction to generative AI and agents
 - Large language models (LLMs)
 - Prompts
 - AI agents
 - Module assessment
- 3 - Introduction to natural language processing concepts
 - Tokenization
 - Statistical text analysis.
 - Semantic language models
 - Module assessment
- 4 - Introduction to AI speech concepts
 - Speech-enabled solutions
 - Speech recognition
 - Speech synthesis
 - Module assessment
- 5 - Introduction to computer vision concepts
 - Computer vision tasks and techniques
 - Images and image processing
 - Convolutional neural networks

- Vision transformers and multimodal models
- Image generation
- Module assessment
- 6 - Introduction to AI-powered information extraction concepts
 - Overview of information extraction
 - Optical character recognition (OCR)
 - Field extraction and mapping
 - Module assessment
- 7 - Get started with AI in Azure
 - Understand Azure
 - Developing AI apps on Azure
 - Microsoft Foundry for AI
 - Using Microsoft Foundry endpoints
- 8 - Get started with generative AI and agents in Azure
 - Generative AI models
 - Using a generative AI model
 - Creating an agent
- 9 - Get started with text analysis in Azure
 - Azure Language
 - Azure Language SDK
 - Azure Language MCP
 - Module assessment
- 10 - Get started with speech in Azure
 - Speech recognition
 - Speech synthesis
 - Creating a speech-capable agent
 - Module assessment
- 11 - Get started with computer vision in Azure
 - Multimodal models for image analysis
 - Image generation models
 - Video generation models
 - Module assessment
- 12 - Get started with AI-powered information extraction in Azure
 - Extract information from documents
 - Extract information from audio and video
 - Module assessment

Who Should Attend

This course is for aspiring technology professionals at the beginning of their career in AI solution development. Some knowledge of Python coding syntax and programming techniques is useful. Additionally, knowledge of core cloud concepts, including cloud storage, cloud compute, and cloud-based authentication and authorization is recommended.