

AI-900: Introduction to AI in Azure (1 Day)

Course Overview

This course introduces fundamental concepts related to artificial intelligence (AI), and the services in Microsoft Azure that can be used to create AI solutions. The course is not designed to teach students to become professional data scientists or software developers, but rather to build awareness of common AI workloads and the ability to identify Azure services to support them. The hands-on exercises in the course are based on Learn modules, and students are encouraged to use the content on Learn as reference materials to reinforce what they learn in the class and to explore topics in more depth.

The Introduction to AI in Azure course is designed for anyone interested in learning about the types of solution artificial intelligence (AI) makes possible, and the services on Microsoft Azure that you can use to create them. You don't need to have any experience of using Microsoft Azure before taking this course, but a basic level of familiarity with computer technology and the Internet is assumed. Some of the concepts covered in the course require a basic understanding of mathematics, such as the ability to interpret charts. The course includes hands-on activities that involve working with data and running code, so a knowledge of fundamental programming principles will be helpful.

Course Benefits

- Describe Artificial Intelligence workloads and considerations.
- Describe fundamental principles of machine learning on Azure.
- Describe features of computer vision workloads on Azure.
- Describe features of Natural Language Processing (NLP) workloads on Azure.

Course Outline

Introduction to AI concepts

- Introduction to AI
- Generative AI
- Computer vision
- Speech
- Natural language processing
- Extract data and insights
- Responsible AI

Introduction to machine learning concepts

- Machine learning models
- Types of machine learning model
- Regression
- Binary classification
- Multiclass classification
- Clustering
- Deep learning

Get started with machine learning in Azure

- Define the problem
- Get and prepare data
- Train the model
- Use Azure Machine Learning studio
- Integrate a model

Introduction to generative AI concepts

- What is generative AI?
- How do language models work?
- Understand how transformers advance language models
- Understand differences in language models
- Improve prompt results
- Create responsible generative AI solutions

Get started with generative AI in Azure

- Understand generative AI applications
- Understand tools to develop generative AI
- Understand Azure AI Foundry's model catalog
- Understand Azure AI Foundry capabilities
- Understand observability

Introduction to natural language processing concepts

- Understand how language is processed
- Understand statistical techniques for NLP
- Understand semantic language models

Get started with natural language processing in Azure

- Understand natural language processing on Azure
- Understand Azure AI Language's text analysis capabilities
- Azure AI Language's conversational AI capabilities
- Azure AI Translator capabilities
- Get started in Azure AI Foundry

Get started with speech in Azure

- Understand speech recognition and synthesis
- Get started with speech on Azure
- Use Azure AI Speech

Introduction to computer vision concepts

- Understand image processing
- Machine learning for computer vision
- Understand modern vision models

Get started with computer vision in Azure

- Understand Azure AI services for computer vision
- Understand Azure AI Vision Image Analysis capabilities
- Understand Azure AI Vision's Face service capabilities
- Get started in Azure AI Foundry portal

Introduction to AI-powered information extraction concepts

- Understand the extraction of data from images
- Understand the extraction of data from forms
- Understand multimodal data extraction
- Understand data extraction for knowledge mining

Get started with AI-powered information extraction in Azure

- Azure AI services for information extraction
- Extract information with Azure AI Vision
- Extract multimodal information with Azure AI Content Understanding
- Extract information from forms with Azure AI Document Intelligence
- Create a knowledge mining solution with Azure AI Search