



# **Microsoft Azure AI Fundamentals (AI-900T00)**

#### **COURSE OVERVIEW**

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 course is designed as a blended learning experience that combines instructor-led training with online materials on the Microsoft Learn platform

(https://azure.com/learn). 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.

### WHO WILL BENEFIT FROM THIS COURSE?

The Azure AI Fundamentals 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.

#### PREREQUISITES

Prerequisite certification is not required before taking this course. Successful Azure AI Fundamental students start with some basic awareness of computing and internet concepts and an interest in using Azure AI services.

Specifically:

- Experience using computers and the internet.
- Interest in use cases for AI applications and machine learning models.
- A willingness to learn through hands-on exploration.

#### **COURSE OBJECTIVES**

Students will learn the:

- Fundamental AI Concepts
- Fundamentals of machine learning
- Fundamentals of Azure AI services
- Fundamentals of Computer Vision
- Fundamentals of Facial Recognition
- Fundamentals of Optical Character Recognition
- Fundamentals of Text Analysis with the Language Service



- Fundamentals of question answering with the Language Service
- Fundamentals of conversational language understanding
- Fundamentals of Azure AI Speech
- Fundamentals of Azure AI Document Intelligence
- Fundamentals of Knowledge Mining with Azure Cognitive Search
- Fundamentals of Generative AI
- Fundamentals of Azure OpenAI Service
- Fundamentals of Responsible Generative AI

## **COURSE OUTLINE**

Module 1: Fundamental AI Concepts

• In this module, you'll learn about the kinds of solutions AI can make possible and considerations for responsible AI practices.

Module 2: Fundamentals of machine learning

- Describe the core concepts of machine learning
- Identify different types of machine learning
- Describe considerations for training and evaluating machine learning models
- Describe the core concepts of deep learning
- Use automated machine learning in Azure Machine Learning service

Module 3: Fundamentals of Azure AI services

- Understand applications Azure AI services can be used to build
- Understand how to access Azure AI services in the Azure portal
- Understand how to use Azure AI services keys and endpoint for authentication
- Create and use an Azure AI services resource in a Content Safety Studio setting Module 4: Fundamentals of Computer Vision
  - Learn how to use the Azure Al Vision service to analyze images.
- Module 5: Fundamentals of Facial Recognition
- Learn how to use Azure AI Face service to detect and analyze faces in images. Module 6: Fundamentals of Optical Character Recognition
  - Learn how to read text in images with Azure AI Vision.
- Module 7: Fundamentals of Text Analysis with the Language Service
  - Learn how to use Azure Al-Language for text analysis
- Module 8: Fundamentals of question answering with the Language Service
  - After completing this module, you'll be able to understand how to use Azure AI-Language and Azure AI Bot Service to create a bot.

Module 9: Fundamentals of conversational language understanding

- Learn what conversational language understanding is.
- Learn about key features, such as intents and utterances.
- Build and publish a natural-language machine-learning model.

Module 10: Fundamentals of Azure AI Speech

- Learn about speech recognition and synthesis
- Learn how to use Azure AI Speech





• Learn how to use the prebuilt receipt processing capabilities of Azure AI Document Intelligence.

Module 12: Fundamentals of Knowledge Mining with Azure Cognitive Search

- Explore Azure Cognitive Search
- Create an Azure Cognitive Search index
- Import data to the index
- Query the Azure Cognitive Search index

Module 13: Fundamentals of Generative AI

- Understand generative AI's place in the development of artificial intelligence
- Understand large language models and their role in intelligent applications
- Describe how Azure OpenAI supports intelligent application creation
- Describe examples of copilots and good prompts

Module 14: Fundamentals of Azure OpenAI Service

- Describe Azure OpenAI workloads and access the Azure OpenAI Service
- Understand generative AI models
- Understand Azure OpenAI's language, code, and image capabilities
- Understand Azure OpenAI's responsible AI practices and limited access policies

Module 15: Fundamentals of Responsible Generative AI

- Describe an overall process for responsible generative AI solution development
- Identify and prioritize potential harms relevant to a generative AI solution
- Measure the presence of harms in a generative AI solution
- Mitigate harms in a generative AI solution
- Prepare to deploy and operate a generative AI solution responsibly

#### WHY TRAIN WITH SUNSET LEARNING INSTITUTE?

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their technology Investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

#### Premiere World Class Instruction Team

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012





#### Enhanced Learning Experience

• The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

#### Convenient and Reliable Training Experience

- You have the option to attend classes live with the instructor, at any of our established training facilities, or from the convenience of your home or office
- All Sunset Learning Institute classes are guaranteed to run you can count on us to deliver the training you need when you need it!

#### **Outstanding Customer Service**

- You will work with a dedicated account manager to suggest the optimal learning path for you and/or your team
- An enthusiastic student services team is available to answer any questions and ensure a quality training experience

# Interested in Private Group Training? Contact Us