

# AI-900T00: Microsoft Azure AI Fundamentals

**Course Duration: 8 Hours (1 Day)**

## Overview

The AI-900T00: Microsoft Azure AI Fundamentals course is an introductory program that provides learners with a foundational understanding of artificial intelligence (AI) concepts and associated Microsoft Azure services. This comprehensive course is designed to guide students through the basics of AI, machine learning, Computer Vision, Natural Language Processing, Conversational AI, and more, with a strong emphasis on practical exercises using Azure's AI tools. Learners will gain knowledge on the fundamentals of artificial intelligence, including how AI is integrated within Azure and the importance of Responsible AI practices. The course also dives into the core fundamentals of machine learning, teaching how to apply and manage these models in Azure. By exploring Azure AI Services, students get hands-on experience with automated machine learning and other AI capabilities. As part of the Computer Vision module, attendees will learn to analyse images, recognize faces, and read text using Azure's Vision Studio. The course also covers Natural Language Processing features, offering insights into text analysis, conversational understanding, and speech services in Azure. Finally, the course discusses the emerging field of Generative AI and how it is facilitated through Azure Open AI Service, highlighting the importance of ethical considerations when deploying these powerful AI models. By the end of the AI-900T00 course, participants will have a solid foundation in Azure AI Services, empowering them to implement AI solutions ethically and effectively in various applications.

## Audience Profile

Target Audience for AI-900T00: Microsoft Azure AI Fundamentals

- IT professionals interested in AI technologies
- Data Analysts seeking to understand AI applications
- Software Developers looking to integrate AI into their solutions
- Cloud Solution Architects exploring Azure AI capabilities
- Data Scientists beginning with Azure AI tools and services
- AI hobbyists and enthusiasts aiming to formalize their knowledge
- Technical Managers overseeing AI-driven projects
- Students studying computer science or related fields
- Non-technical roles seeking to comprehend the impact of AI in their industry (e.g., Business Analysts, Project Managers)
- Professionals working in industries where AI is increasingly relevant, such as healthcare, finance, and retail
- Educators and trainers preparing to teach AI fundamentals

- Career changers entering the AI and tech field
- Learning Objectives - What you will Learn in this AI-900T00: Microsoft Azure AI Fundamentals?
- Introduction to the AI-900T00: Microsoft Azure AI Fundamentals Course Learning Outcomes and Concepts:
- This course provides foundational knowledge of AI concepts, machine learning, vision, natural language processing, and conversational AI using Azure services.

## Course Syllabus

### **Module 01: Microsoft Azure AI Fundamentals: AI Overview**

- Fundamental AI Concepts
- Fundamentals of machine learning
- Fundamentals of Azure AI services
- Exercise - Explore Automated Machine Learning in Azure Machine Learning
- Exercise - Explore Azure AI Services

### **Module 02: Microsoft Azure AI Fundamentals: Computer Vision**

- Fundamentals of Computer Vision
- Fundamentals of Facial Recognition
- Fundamentals of optical character recognition
- Exercise - Analyze images in Vision Studio
- Exercise - Detect faces in Vision Studio
- Exercise - Read text in Vision Studio

### **Module 03: Microsoft Azure AI Fundamentals: Natural Language Processing**

- 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
- Exercise - Analyze text with Language Studio
- Exercise - Use question answering with Language Studio
- Exercise - Use Conversational Language Understanding with Language Studio
- Exercise - Explore Speech Studio

### **Module 04: Document Intelligence and Knowledge Mining**

- Fundamentals of Azure AI Document Intelligence

- Fundamentals of Knowledge Mining and Azure AI Search
- Exercise - Extract from data in Document Intelligence Studio
- Exercise - Explore an Azure AI Search index (UI)

## **Module 05: Microsoft Azure AI Fundamentals: Generative AI**

- Fundamentals of Generative AI
- Fundamentals of Azure Open AI Service
- Fundamentals of Responsible Generative AI
- Exercise - Explore generative AI with Bing Copilot
- Exercise - Explore Azure Open AI Service
- Exercise - Explore content filters in Azure Open AI