

# Azure Al Engineer Associate: Al-102

Delivered by:



Microsoft Azure

## **Table of Contents**

About the Course	03
Key Features of the Course	04
Who Should Enroll in this Course?	05
Application Process	05
Course Prospects and Benefits	06
Learning Objectives	07
Learning Path	09
Certificate	11
About Simplilearn	12

#### **About the Course**

Artificial Intelligence is rapidly changing, and Microsoft Azure is at the forefront of this revolution. This AI-102 course equips you to harness the power of Azure's AI services and leverage their potential in your applications. You'll gain hands-on experience with core functionalities like computer vision, language processing, and knowledge discovery. Learn to analyze images and videos, extract meaning from text, and even explore the exciting possibilities of generative AI.

Furthermore, the program dives into specific Azure services. You'll master building applications for tasks like image classification, facial recognition, text analysis, question-answering chatbots, and information retrieval using Azure Search. you'll gain the practical skills to integrate Azure services seamlessly into your projects. This includes working with REST APIs and SDKs, managing network security, and ensuring robust logging for your AI models.

Finally, AI-102 equips you with the knowledge to explore the cutting-edge world of Azure OpenAI. This service allows you to leverage large language models for creative text generation and explore the responsible deployment of such powerful tools. By the end of this course, you'll be well-equipped to design, develop, and deploy real-world AI solutions using the comprehensive suite of Microsoft Azure AI Services.

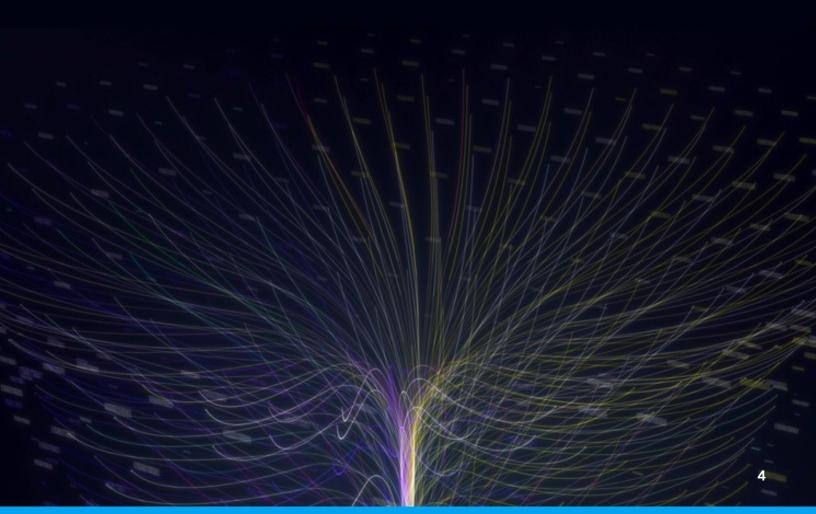
This program is designed to give experienced professionals extensive Microsoft Azure AI 102 training through online live virtual classes, hands-on projects, and integrated labs. Learners will get access to live classes that provide a high-engagement learning experience and practice through projects to help master essential AI engineering skills.

## **Key Features of the Course**

- Microsoft Certified: Azure AI Engineer Associate - AI-102 aligned training
- Access to official Microsoft handbooks aligned to the examination

- Training sessions conducted by Microsoft-certified trainers
- Official course completion badge/ certificate hosted on the Microsoft Learn portal

- Practice labs and projects with Azure labs
- Learn at your convenience through our live virtual training sessions



#### Who Should Enroll in this Course?

The online Microsoft Certified Azure AI Engineer Associate course is ideal for experienced programmers who wish to develop AI-infused applications leveraging Azure services. Learners should be familiar with Python or C#, REST API concepts, JSON, and Azure services solutions.

#### These roles include, but are not limited to:

- Azure Developers
- Software Developers
- Al Engineers

- Data Scientists
- Technical Team Leads

## **Application Process**

#### 1 Seamless enrollment

You can seamlessly enroll via our <u>website</u> or app by clicking the Enroll Now button, filling out the details, and paying the course fee through various payment options, including EMIs.

OR

#### 2 Talk to our advisors

You can talk to our advisors: Our team of dedicated admissions counselors is prepared to address your questions or concerns about the course. Our team is available to:

- 1. Answer your questions about the application process
- 2. Discuss your financing options
- 3. Provide insight into the curriculum, program outcomes, and more

### **Course Prospects and Benefits**

Azure continues to experience significant growth, with Microsoft's intelligent cloud revenue (which includes Azure) growing at a rate of 24.3% in Q1 of 2024 (Microsoft). Microsoft Azure holds a strong position in the cloud infrastructure industry, offering a comprehensive suite of services and capabilities to cater to various needs, such as

- Diverse Range of Cloud Services
  - 1. Compute
  - 2. Storage
  - 3. Networking
- Focus on Hybrid and Multi-Cloud
- Security and Compliance
- Scalability and Flexibility
- Global Reach and Availability

- 4. Database
- 5. Analytics & AI
- 6. Management Tools
- Integration with Microsoft Products and Services
- Continuous Innovation

Azure certifications offer several significant benefits for cloud professionals, enhancing their careers in various ways:

- Increased Earning Potential
- Enhanced Credibility and Recognition
- Improved Knowledge and Skills
- Career Advancement

- Specialization and Differentiation
- Staying Up-to-Date with Trends
- Validates Cloud Expertise

### **Learning Objectives**

This Microsoft AI-102 certification course equips you to design and implement real-world AI solutions using Azure's cloud services. You'll learn about core services like computer vision, language processing, and speech recognition. The course also covers responsible AI practices, managing costs, and deploying AI models in containers. In addition to exploring Azure Machine Learning, you'll gain expertise with specific services like Azure AI Search, Custom Vision, and OpenAI for tasks like image analysis, text classification, and generating creative text formats.

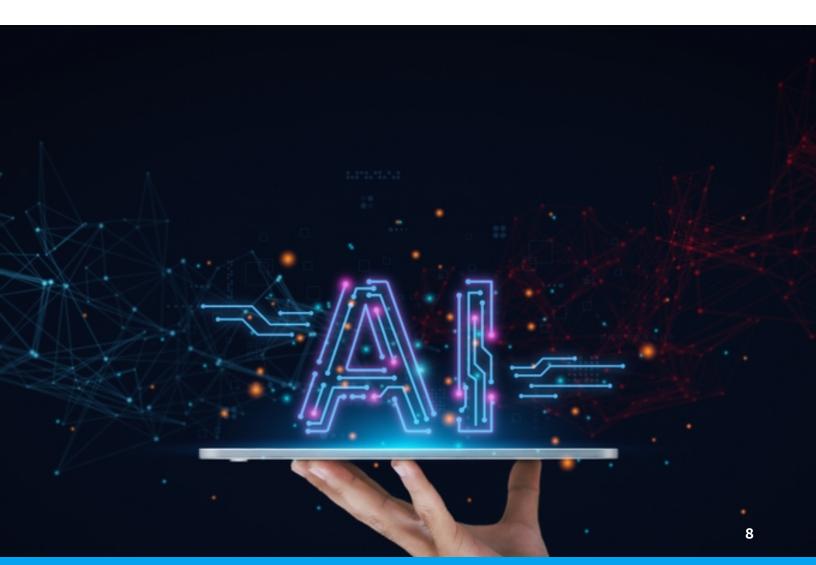
#### Here are some of the learning objectives as per the Microsoft website:

- Understand the capabilities of Azure Al services and Open Al services
- Use a REST API and an SDK to consume Azure AI services
- Manage network security for Azure Al services
- Manage Azure AI services diagnostic logging
- Consume Azure Al services from a container
- Provision an Azure Al Vision resource
- Understand image classification
- Train an image classifier
- Identify options for face detection, analysis, and identification
- Implement facial recognition

- Develop an application that can read printed and handwritten text
- Use Azure Video Indexer widgets and APIs
- Analyze text sentiment
- Create a question-answering bot to interact with using natural language
- Train, test, publish, and review an Azure AI-Language model
- Submit classification tasks from your app
- Understand how to build entity recognition projects
- Understand language detection, translation, and transliteration
- Use the Azure AI speech-to-text API to implement speech recognition
- Generate text translation from speech

- Create an Azure AI Search solution
- Create a knowledge store from an Azure AI Search pipeline
- Create and connect to Azure AI Document Intelligence resources in Azure
- Identify business problems that you can solve by using prebuilt models in Forms Analyzer
- Use Document Intelligence's capabilities with SDKs, REST API, and Document Intelligence Studio
- Create an Azure OpenAl Service resource and understand the types of Azure OpenAl base models

- Generate completions to prompts using the REST API and language-specific SDKs
- Understand the concept of prompt engineering and its role in optimizing Azure OpenAI models' performance
- Use natural language prompts to write code
- Use the Azure OpenAl REST interface to integrate DALL-E image generation into your apps
- Use Azure OpenAl API to generate responses based on your data
- Prepare to deploy and operate a generative AI solution responsibly



## **Learning Path**

 Prepare to develop AI solutions on Azure

[Click here for details]

2. Create and consume Azure Al services

[Click here for details]

- 3. Secure Azure AI services [Click here for details]
- 4. Monitor Azure AI services [Click here for details]
- 5. Deploy Azure AI services in containers

[Click here for details]

- 6. Analyze images [Click here for details]
- 7. Classify images [Click here for details]
- 8. Detect, analyze, and recognize faces

[Click here for details]

 Read Text in images and documents with the Azure AI Vision Service [Click here for details] 10. Analyze video [Click here for details]

11. Analyze text with Azure AI Language
[Click here for details]

- 12. Create question answering solutions with Azure AI Language
  [Click here for details]
- 13. Build a conversational language understanding model [Click here for details]
- 14. Create a custom text classification solution [Click here for details]
- 15. Custom named entity recognition
  [Click here for details]
- 16. Translate text with Azure AI Translator service [Click here for details]
- 17. Create speech-enabled apps with Azure AI services
  [Click here for details]

- 18. Translate speech with the Azure AI Speech service [Click here for details]
- ICreate an Azure AI Search solution
   [Click here for details]
- 20. Create a custom skill for Azure AI Search
  [Click here for details]
- 21. Create a knowledge store with Azure AI Search
  [Click here for details]
- 22. Plan an Azure AI Document Intelligence solution
  [Click here for details]
- 23. Use prebuilt Document intelligence models [Click here for details]
- 24. Extract data from forms with Document Intelligence [Click here for details]
- 25. Get started with Azure OpenAl Service
  [Click here for details]

- 26. Build natural language solutions with Azure OpenAl Service
  [Click here for details]
- 27. Apply prompt engineering with Azure OpenAI Service [Click here for details]
- 28. Generate code with Azure OpenAl Service
  [Click here for details]
- 29. Generate images with Azure OpenAl Service
  [Click here for details]
- 30. Implement Retrieval
  Augmented Generation (RAG)
  with Azure OpenAI Service
  [Click here for details]
- 31. Fundamentals of Responsible Generative AI

  [Click here for details]

#### Certificate

You will receive a certificate of completion from Simplilearn that will testify to the skills you have gained via the Microsoft Certified: Azure AI Engineer Associate: AI-102 course. You will also be awarded an MS Learn certificate from Microsoft.





## **About Simplilearn**

Simplification is the world's #1 online bootcamp provider that enables learners through rigorous and highly specialized training. We focus on emerging technologies and processes transforming the digital world at a fraction of the cost and time of traditional approaches. Over one million professionals and 2000 corporate training organizations have harnessed our award-winning programs to achieve their career and business goals.





## simplilearn

#### USA

Simplilearn Americas, Inc. 201 Spear Street, Suite 1100, San Francisco, CA. 94105 Unted States Phone No: +1-844-532-7688

#### INDIA

Simplilearn Solutions Pvt Ltd # 53/1 C. Manoj Arcade, 24th Main, Harlkunte 2nd Sector, HSR Layout Bangalore - 560102 Call us at: 1800-212-7688