



AI-102: Azure AI Engineer Associate

Course Overview

AI-102: AI-102 equips you with the expertise to design, develop, and implement AI solutions using Azure AI. This course integrates your existing programming and AI knowledge to manage AI solution planning, image and video processing, natural language processing, knowledge mining, and conversational AI implementation.

Highlights

- **Interactive Hands-On Labs:** Gain practical experience through interactive labs and exercises, allowing you to apply your newly acquired skills in real-world scenarios.
- **Personalized Learning Plans:** Enjoy tailor-made training programs that cater to your unique learning requirements, ensuring you receive the most relevant knowledge and guidance.
- **Flexible Scheduling:** Choose from a range of flexible dates and timings to seamlessly fit your training into your busy schedule.
- **Accredited Training:** Our training is accredited and adheres to the highest quality standards, ensuring you receive top-notch education.
- **Cost-Effective Pricing:** Access all these benefits at a reasonable cost, ensuring that you receive excellent value for your investment in your AI education.

Who Should Attend?

- AI and software engineers eager to explore the world of AI solutions.
- AI developers and data scientists who want to enhance their AI skills.
- Software engineers aiming to integrate AI services into applications.
- IT professionals looking to leverage Azure services for AI.
- Students learning about AI and cloud services.
- Technical team leads and managers overseeing AI project implementations.

Prerequisites

To enroll in this course, it is recommended to have:

- Basic proficiency in programming languages such as C# or Python
- A general awareness of AI and machine learning principles
- Some exposure to Azure AI services
- A fundamental understanding of REST API concepts
- A willingness to explore AI solution development and software development.

Course Modules

Module 1 Get Started with Azure AI Services

- Plan and prepare to develop AI solutions on Azure
- Create and consume Azure AI services
- Secure Azure AI services
- Monitor Azure AI services
- Deploy Azure AI services in containers
- Use AI responsibly with Azure AI Foundry Content Safety

Module 2 Develop Generative AI Apps in Azure

- Plan and prepare to develop AI solutions on Azure
- Choose and deploy models from the model catalog in Azure AI Foundry portal
- Develop an AI app with the Azure AI Foundry SDK
- Get started with prompt flow to develop language model apps in the Azure AI Foundry

- Fine-tune a language model with Azure AI Foundry
- Implement a responsible generative AI solution in Azure AI Foundry
- Evaluate generative AI performance in Azure AI Foundry portal

Hands-On

- Choose and deploy a language model: Learn how to find and select appropriate models for your generative AI project.
- Create a generative AI chat app: Build an app that connects to your project and chats with a language model.
- Create a generative AI app that uses your own data: Use the Retrieval Augmented Generation (RAG) model to build a chat app that grounds prompts using your own data.
- Apply content filters to prevent the output of harmful content: Apply content filters that mitigate potentially offensive or harmful output in your generative AI app.
- Evaluate generative AI model performance: Evaluate models and prompts to optimize the performance of your chat app and its ability to respond appropriately.

Module 3 Develop AI Agents on Azure

- Get started with AI agent development on Azure
- Develop an AI agent with Azure AI Foundry Agent Service
- Integrate custom tools into your agent
- Develop an AI agent with Semantic Kernel
- Orchestrate a multi-agent solution using Semantic Kernel

Hands-On

- Explore AI Agent development: Take your first steps in developing AI agents by exploring the Azure AI Agent service in the Azure AI Foundry portal.
- Develop an AI agent: Use the Azure AI Agent Service to develop an agent that uses built-in tools.
- Use a custom function in an AI agent: Use functions to add custom capabilities to your agents.
- Develop an Azure AI agent with the Semantic Kernel SDK: Use the Semantic Kernel SDK to create and use an Azure AI Agent Service agent.
- Develop a multi-agent solution: Configure multiple agents to collaborate.

Module 4 Develop Natural Language Solutions in Azure

- Analyze text with Azure AI Language
- Create question answering solutions with Azure AI Language
- Build a conversational language understanding model
- Create a custom text classification solution
- Custom named entity recognition
- Translate text with Azure AI Translator service
- Create speech-enabled apps with Azure AI services

Hands-On

- **Analyze text:** Use Azure AI Language to analyze text, including language detection, sentiment analysis, key phrase extraction, and entity recognition.
- **Create a Question Answering solution:** Use Azure AI Language to create a custom question answering solution.
- **Custom text classification:** Apply custom classifications to text input using Azure AI Language.
- **Recognize and Synthesize Speech:** Implement a speaking clock that converts speech to text, and text to speech.
- **Develop an audio-enabled chat app:** Build a generative AI app that supports audio input.

Module 5 Develop Computer Vision Solutions in Azure

- Analyze images
- Read text in images
- Detect, analyze, and recognize faces
- Classify images
- Detect objects in images
- Analyze video
- Develop a vision-enabled generative AI application
- Generate images with AI

Hands-On

- **Analyze images:** Use Azure AI Vision Image Analysis to analyze images, suggest captions and tags, and detect objects and people
- **Read text in images:** Use OCR in the Azure AI Vision Image Analysis service to locate and extract text in images.
- **Detect and analyze faces:** Use the Azure AI Vision Face service to implement face detection and analysis solutions.
- **Classify images:** Use the Azure AI Custom Vision service to train an image classification model.
- Develop a vision-enabled chat app: Build a generative AI app that supports image input.
- **Generate images with AI:** Use an OpenAI DALL-E model in Azure AI Foundry to generate images.

Module 6 Develop AI Information Extraction Solutions in Azure

- Create a multimodal analysis solution with Azure AI Content Understanding
- Create an Azure AI Content Understanding client application
- Use prebuilt Document intelligence models
- Extract data from forms with Azure Document intelligence
- Create a knowledge mining solution with Azure AI Search

Hands-On

- **Extract information from multimodal content:** Use Azure AI Content Understanding to extract insights from documents, images, audio recordings, and videos.
- **Develop a Content Understanding client application:** Use Azure AI Content Understanding REST API to develop a client app for an analyzer.
- **Analyze forms with prebuilt Azure AI Document Intelligence models:** Use prebuilt models to process text fields from documents.
- **Analyze forms with custom Azure AI Document Intelligence models:** Create a custom model to extract specific data from documents.
- **Create a knowledge mining solution:** Use Azure AI Search to extract key information from documents and make it easier to search and analyze.

About CloudThat

Founded in 2012, CloudThat is an award-winning company and the first in India to offer cloud training and consulting services for mid-market and enterprise clients worldwide. Recently, it became the first Indian company to win consecutive AWS Training Partner of the Year (APJ) Awards and the Microsoft Training Services Partner of the Year Award. These achievements represent its 11th award in 8 years. Notably, 20 of CloudThat's Microsoft trainers feature in Microsoft's Top 100 MCTs Global List for 2025, underscoring its global excellence in training.

A pioneer in the cloud domain, CloudThat specializes in Cloud Migration, Data Platforms, DevOps, IoT, and cutting-edge technologies like Gen AI & AI/ML. As a Microsoft Solutions Partner, AWS Advanced Tier Training Partner, and Google Cloud Platform Partner, CloudThat has trained 850k+ professionals across 600+ cloud certifications and supported 500+ consulting projects for 250+ corporates in 30+ countries. These achievements highlight CloudThat's commitment to empowering professionals to advance their skills and careers

Our Success Track

13+ Years of Experience	200+ Corporates served	30+ countries catered
850K+ Professionals trained	500+ Projects delivered	600+ Cloud certifications

To know more about our cloud certification training, email at sales@cloudthat.com or call us at **+918880002200**.