LITC
COMPUTER EDUCATION

Duration: 45 hours

Microsoft Azure AI Engineer Associate Exam Summary:

Note: To ensure success in Microsoft MCF Azure AI certification exam, we recommend authorized training course, practice test and hands-on experience to prepare for Microsoft Certified - Azure AI Engineer Associate (AI-102) exam.

Exam Name	Microsoft Certified - Azure AI Engineer Associate
Exam Code	AI-102
Exam Price	$165 (USD)
Duration	120 mins
Number of Questions	40-60
Passing Score	700 / 1000

Microsoft AI-102 Exam Syllabus Topics

Module1):-Plan and manage an Azure AI solution (15-20%)
Module2):-Implement decision-support solutions (10-15%)
Module3):-Implement Azure AI vision solutions (15-20%)
Module4):-Implement natural language processing solutions (30-25%)
Module5):-Implement knowledge mining and document intelligence solutions (10-15%)
Module6):-Implement generative AI solutions (10-15%)

Microsoft AI-102 Exam Syllabus Topics:

Topic	Details
Plan and Manage an Azure AI solution (15-20%)	
Select the appropriate Azure AI Service	- Select the appropriate service for a computer vision solution - Select the appropriate service for a natural language processing solution - Select the appropriate service for a speech solution - Select the appropriate service for a generative AI solution - Select the appropriate service for a document intelligence solution - Select the appropriate service for a knowledge mining solution
Plan, create and deploy an Azure AI service	- Plan for a solution that meets Responsible AI principles - Create an Azure AI resource - Determine a default endpoint for a service - Integrate Azure AI services into a continuous integration and continuous delivery (CI/CD) pipeline - Plan and implement a container deployment
Manage, monitor, and secure an Azure AI service	- Configure diagnostic logging - Monitor an Azure AI resource - Manage costs for Azure AI services - Manage account keys - Protect account keys by using Azure Key Vault - Manage authentication for an Azure AI Service resource - Manage private communications
Implement content moderation solutions (10-15%)	
Create solutions for content delivery	- Implement a text moderation solution with Azure AI Content Safety - Implement an image moderation solution with Azure AI Content Safety
Implement computer vision solutions (15-20%)	
Analyze images	- Select visual features to meet image processing requirements - Detect objects in images and generate image tags - Include image analysis features in an image processing request - Interpret image processing responses - Extract text from images using Azure AI Vision - Convert handwritten text using Azure AI Vision
Implement custom computer vision models by using Azure AI Vision	- Choose between image classification and object detection models - Label images - Train a custom image model, including image classification and object detection - Evaluate custom vision model metrics - Publish a custom vision model - Consume a custom vision model
Analyze videos	- Use Azure AI Video Indexer to extract insights from a video or live stream - Use Azure AI Vision Spatial Analysis to detect presence and movement of people in video

Topic	Details
Implement natural language processing solutions (30-35%)	
Analyze text by using Azure AI Language	- Extract key phrases - Extract entities - Determine sentiment of text - Detect the language used in text - Detect personally identifiable information (PII) in text
Process speech by using Azure AI Speech	- Implement text-to-speech - Implement speech-to-text - Improve text-to-speech by using Speech Synthesis Markup Language (SSML) - Implement custom speech solutions - Implement intent recognition - Implement keyword recognition
Translate language	- Translate text and documents by using the Azure AI Translator service - Implement custom translation, including training, improving, and publishing a custom model - Translate speech-to-speech by using the Azure AI Speech service - Translate speech-to-text by using the Azure AI Speech service - Translate to multiple languages simultaneously
Implement and manage a language understanding model by using Azure AI Language	- Create intents and add utterances - Create entities - Train, evaluate, deploy, and test a language understanding model - Optimize a language understanding model - Consume a language model from a client application - Backup and recover language understanding models
Create a custom question answering solution by using Azure AI Language	- Create a custom question answering project - Add question-and-answer pairs manually - Import sources - Train and test a knowledge base - Publish a knowledge base - Create a multi-turn conversation - Add alternate phrasing - Add chit-chat to a knowledge base - Export a knowledge base - Create a multi-language question answering solution

Topic	Details
Implement knowledge mining and document intelligence solutions (10-15%)	
Implement an Azure AI Search solution	- Provision an Azure AI Search resource - Create data sources - Create an index - Define a skillset - Implement custom skills and include them in a skillset - Create and run an indexer - Query an index, including syntax, sorting, filtering, and wildcards - Manage Knowledge Store projections, including file, object, and table projections
Implement an Azure AI Document Intelligence solution	- Provision a Document Intelligence resource - Use prebuilt models to extract data from documents - Implement a custom document intelligence model - Train, test, and publish a custom document intelligence model - Create a composed document intelligence model - Implement a document intelligence model as a custom Azure AI Search skill
Implement generative AI solutions (10-15%)	
Use Azure OpenAI Service to generate content	- Provision an Azure OpenAI Service resource - Select and deploy an Azure OpenAI model - Submit prompts to generate natural language - Submit prompts to generate code - Use the DALL-E model to generate images - Use Azure OpenAI APIs to submit prompts and receive responses - Use large multimodal models in Azure OpenAI
Optimize generative AI	- Configure parameters to control generative behavior - Apply prompt engineering techniques to improve responses - Use your own data with an Azure OpenAI model - Fine-tune an Azure OpenAI model

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