AI-102: Azure AI Engineer Associate

Overview

Microsoft Certified: Azure AI Engineer Associate certification validates ability to design, implement, and maintain AI solutions on Microsoft Azure.

Exam Details

- **Exam Code:** AI-102
- **Duration:** 120 minutes
- **Questions:** 40-60 multiple choice
- **Passing Score:** ~700/1000
- **Cost:** $165 USD
- **Prerequisites:** AZ-900 recommended, practical Azure experience required

Core Skills Tested

1. Azure AI Services

- Computer Vision (image analysis, OCR)
- Language services (NLP, sentiment analysis)
- Speech services (text-to-speech, speech recognition)
- Document Intelligence

2. Azure OpenAI

- Deploying GPT models
- Prompt engineering
- Content moderation with Moderations API
- Token management

3. Azure AI Search

- Creating indexes and indexers
- Relevance tuning and ranking
- Semantic search implementation
- Blob storage integration

4. Custom Models & Training

- Machine learning pipelines
- Model evaluation and optimization
- Custom vision models
- Language model fine-tuning

5. Responsible AI

- Bias detection and mitigation
- Privacy and security compliance
- Ethical AI considerations
- Monitoring and governance

Study Topics

Cognitive Services Configuration - Resource creation, authentication, API endpoints, SDK integration

Document Processing - Form Recognizer for invoice/receipt extraction, table detection, custom model training

Vision Solutions - Face detection, spatial analysis, video indexing, image classification

NLP & Translation - Entity recognition, key phrase extraction, language detection, multi-language support

Generative AI Integration - Azure OpenAI prompt design, RAG pipelines, token optimization

Recommended Study Path

1. Azure Fundamentals (AZ-900)
2. Azure AI Services hands-on labs
3. Official Microsoft Learn modules
4. Practice exams on Pluralsight/Whizlabs
5. Real-world project implementation

Resources

- Microsoft Learn: learn.microsoft.com
- Official Study Guide: Microsoft Docs
- Practice Tests: Pluralsight, Whizlabs, Examtopics
- Hands-on Labs: Azure Portal, GitHub samples

Tips for Success

- Build 2+ AI projects using Azure services
- Master prompt engineering fundamentals
- Understand RAG architecture deeply
- Practice with live Azure resources
- Review common errors in documentation