KOENIG step forward

Microsoft Solutions Partner
Microsoft Cloud Training Services

KOENIG SOLUTIONS · COURSE OUTLINE

DW-201: Building and Modernizing AI Apps on Azure

Learn to build, deploy and secure AI-powered applications on Azure using AI services, data platforms and DevOps practices.

16 Hours	9	34	13
DURATION	MODULES	TOPICS	HANDS-ON ACTIVITIES

COURSE OVERVIEW

This course covers building AI applications on Azure, beginning with Azure AI Services, responsible AI and the Well-Architected Framework, followed by DevOps practices with GitHub. It then addresses building and deploying apps using Azure App Service, Azure Kubernetes Service and Azure Functions, and working with Azure Data Services including Azure SQL Database, PostgreSQL and globally distributed Azure Cosmos DB. Further modules explore Azure AI Services such as speech, language, vision and decision services, and the Azure OpenAI Service covering prompt engineering, embeddings and code generation. The course closes with applying the Well-Architected Framework and securing applications using Azure Key Vault and Azure AD (Entra ID).

WHO THIS COURSE IS FOR

- **Application Developers**
- **Cloud Solution Architects**
- **DevOps Engineers**
- **AI Developers**
- **Database Administrators**
- **Security Engineers**

LEARNING OBJECTIVES

- Explain Azure AI Services and responsible AI principles
- Apply the Well-Architected Framework to application design
- Plan, deliver, test and operate apps with GitHub DevOps
- Deploy apps using Azure App Service, AKS and Functions
- Configure Azure SQL Database and PostgreSQL for apps
- Implement Azure Cosmos DB data modeling and partitioning
- Apply Azure OpenAI Service for prompt engineering and embeddings
- Secure applications with Azure Key Vault and Entra ID

COURSE SYLLABUS

9 Modules, 34 Topics

01

Introduction to AI Apps

TOPICS

Azure AI Services · Responsible AI · Well-Architected Framework · DevOps and Security

02

DevOps with GitHub

TOPICS

Plan · Deliver · Test · Operate and Secure

03

4 Activities

Building and Deploying Apps on Azure

TOPICS

Azure App Service · Azure Kubernetes Service (AKS) · Azure Functions

04

Azure Data Services

TOPICS

Azure SQL Database · Azure Database for PostgreSQL

05

2 Activities

Globally Distributed Databases

TOPICS

Introduction to Azure Cosmos DB · Choosing the appropriate API · Data Modeling · Partitioning

06

Azure AI Services

TOPICS

Introduction and Use cases · Speech services · Language services · Vision · **Decision:** Anomaly Detector · **Decision:** Content Safety

07

5 Activities

Azure OpenAI Service

TOPICS

Key concepts and models · Prompt Engineering · Embeddings and filtering · Codex and code generation

08

Well-Architected Framework

TOPICS

Reliability · Security · Cost optimization · Operational Excellence · Performance Efficiency

09

2 Activities

Security

TOPICS

- Azure Key Vault
- Authentication and authorization with Azure AD (Entra ID)

HANDS-ON ACTIVITIES

Practise What You Learn

#	MODULE	ACTIVITY
03	**Building and Deploying Apps on Azure**	■ Creating and deploying a web app using Azure App Service ■ Autoscaling the web app by using custom metrics ■ Containerizing and migrating to the Azure Kubernetes Service ■ Creating a function app in Azure
05	**Globally Distributed Databases**	■ Integrating Azure SQL Database into a web app ■ Deploy Azure Cosmos DB service for an app to store and access data
07	**Azure OpenAI Service**	■ Recognizing and translating speech to text using speech translation service ■ Recognizing intents with Conversational Language Understanding (CLU) ■ Generating e-mail content using Azure OpenAI service ■ Utilizing prompt engineering using Chat GPT ■ Moderating text and image content using Azure AI Content Safety Studio
09	**Security**	■ Securing App Service connection to Cognitive Service using Azure Key Vault ■ Configuring your App Service or Azure Functions app to use Entra ID login

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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