

KOENIG SOLUTIONS · COURSE OUTLINE

AI-900 Exam Prep

Learn to describe AI and machine learning workloads on Azure, from computer vision and NLP to conversational AI and responsible AI principles.

5

MODULES

49

TOPICS

COURSE OVERVIEW

This course covers artificial intelligence workloads and considerations, including common AI workload types and guiding principles for responsible AI. It then addresses fundamental machine learning principles on Azure, covering machine learning types, core concepts, solution tasks, and no-code machine learning with Azure Machine Learning studio. The course also examines computer vision workloads and related Azure tools, natural language processing workloads and services, and conversational AI workloads including webchat bots, voice menus, and Azure services such as QnA Maker and the Azure Bot service.

WHO THIS COURSE IS FOR

Audience Profile

Candidates for this exam should have foundational knowledge of machine learning (ML) and artificial intelligence (AI) concepts and related Microsoft Azure services

This exam is an opportunity to demonstrate knowledge of common ML and AI workloads and how to implement them on Azure

This exam is intended for candidates with both technical and non-technical backgrounds. Data science and software engineering experience are not required; however, some general programming knowledge or experience would be beneficial.

Azure AI Fundamentals can be used to prepare for other Azure role-based certifications like Azure Data Scientist Associate or Azure AI Engineer Associate, but it is not a prerequisite for any of them

LEARNING OBJECTIVES

- Identify features of common AI workloads such as computer vision and NLP
- Describe guiding principles for responsible AI such as fairness
- Identify common machine learning types such as regression and clustering
- Describe core machine learning concepts such as features and labels
- Identify core tasks in creating a machine learning solution
- Describe no-code machine learning in Azure Machine Learning studio
- Identify Azure tools and services for computer vision tasks
- Identify Azure services for NLP and conversational AI workloads

5 Modules, 49 Topics

01

15-20%

Describe Artificial Intelligence Workloads and Considerations

IDENTIFY FEATURES OF COMMON AI WORKLOADS

- identify prediction/forecasting workloads
- identify features of anomaly detection workloads
- identify computer vision workloads
- identify natural language processing or knowledge mining workloads
- identify conversational AI workloads

IDENTIFY GUIDING PRINCIPLES FOR RESPONSIBLE AI

- describe considerations for fairness in an AI solution
- describe considerations for reliability and safety in an AI solution
- describe considerations for privacy and security in an AI solution
- describe considerations for inclusiveness in an AI solution
- describe considerations for transparency in an AI solution
- describe considerations for accountability in an AI solution

02

30-35%

Describe Fundamental Principles of Machine Learning on Azure

IDENTIFY COMMON MACHINE LEARNING TYPES

- identify regression machine learning scenarios
- identify classification machine learning scenarios
- identify clustering machine learning scenarios

DESCRIBE CORE MACHINE LEARNING CONCEPTS

- identify features and labels in a dataset for machine learning
- describe how training and validation datasets are used in machine learning
- describe how machine learning algorithms are used for model training
- select and interpret model evaluation metrics for classification and regression

IDENTIFY CORE TASKS IN CREATING A MACHINE LEARNING SOLUTION

- describe common features of data ingestion and preparation
- describe feature engineering and selection
- describe common features of model training and evaluation
- describe common features of model deployment and management

DESCRIBE CAPABILITIES OF NO-CODE MACHINE LEARNING WITH AZURE MACHINE LEARNING STUDIO

- automated ML Wizard UI
- azure Machine Learning designer

Describe Features of Computer Vision Workloads on Azure

IDENTIFY COMMON TYPES OF COMPUTER VISION SOLUTION

- identify features of image classification solutions
- identify features of object detection solutions
- identify features of semantic segmentation solutions
- identify features of optical character recognition solutions
- identify features of facial detection, facial recognition, and facial analysis solutions

IDENTIFY AZURE TOOLS AND SERVICES FOR COMPUTER VISION TASKS

- identify capabilities of the Computer Vision service
- identify capabilities of the Custom Vision service
- identify capabilities of the Face service
- identify capabilities of the Form Recognizer service

Describe Features of Natural Language Processing (NLP) Workloads on Azure

IDENTIFY FEATURES OF COMMON NLP WORKLOAD SCENARIOS

- identify features and uses for key phrase extraction
- identify features and uses for language modeling
- identify features and uses for entity recognition
- identify features and uses for speech recognition and synthesis
- identify features and uses for sentiment analysis
- identify features and uses for translation

IDENTIFY AZURE TOOLS AND SERVICES FOR NLP WORKLOADS

- identify capabilities of the Text Analytics service
- identify capabilities of the Language Understanding service (LUIS)
- identify capabilities of the Speech service
- identify capabilities of the Translator Text service

Describe Features of Conversational AI Workloads on Azure

IDENTIFY COMMON USE CASES FOR CONVERSATIONAL AI

- identify features and uses for webchat bots
- identify features and uses for telephone voice menus
- identify features and uses for personal digital assistants
- identify common characteristics of conversational AI solutions

IDENTIFY AZURE SERVICES FOR CONVERSATIONAL AI

- identify capabilities of the QnA Maker service
- identify capabilities of the Azure Bot service

NOTES

- The bullets that appear below each of the skills measured are intended to illustrate how the skill is assessed. This list is not definitive or exhaustive.
- Most questions cover features that are General Availability (GA). The exam may contain questions on Preview features if those features are commonly used.
- This exam guide reflects the version updated on January 27, 2021, incorporating tracked changes shown in the source (renamed services and revised wording) that superseded the prior version of the guide.

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

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.

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