

# Microsoft Certified: Azure AI Fundamentals – Skills Measured

**This document contains the skills measured on the exams associated with this certification. It does not include any upcoming or recent changes that have been made to those skills. For more information about upcoming or recent changes, see the associated exam details page(s).**

NOTE: The bullets that appear below each of the skills measured are intended to illustrate how we are assessing that skill. This list is not definitive or exhaustive.

NOTE: In most cases, exams do NOT cover preview features, and some features will only be added to an exam when they are GA (General Availability).

## Exam AI-900: Microsoft Azure AI Fundamentals

### Describe Artificial Intelligence workloads and considerations (15-20%)

#### 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

### Describe fundamental principles of machine learning on Azure (30-35%)

#### 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 common features of feature selection and engineering
- 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:**

- automated Machine Learning UI
- azure Machine Learning designer

## **Describe features of computer vision workloads on Azure (15-20%)**

### **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 (15-20%)**

### **Identify features of common NLP Workload Scenarios**

- identify features and uses for key phrase extraction
- identify features and uses for entity recognition
- identify features and uses for sentiment analysis
- identify features and uses for language modeling
- identify features and uses for speech recognition and synthesis
- 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 Intelligence Service (LUIS)
- identify capabilities of the Speech service
- identify capabilities of the Translator Text service

## **Describe features of conversational AI workloads on Azure (15-20%)**

### **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 Bot Framework