

## **Skills Measured**

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## Skills Measured

### 1. Describe Artificial Intelligence workloads and considerations (15–20%)

- Identify features of common AI workloads
  - Identify computer vision workloads
  - Identify natural language processing workloads
  - Identify document processing workloads
  - Identify features of generative 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

### 2. Describe fundamental principles of machine learning on Azure (15–20%)

- Identify common machine learning techniques
  - Identify regression machine learning scenarios
  - Identify classification machine learning scenarios
  - Identify clustering machine learning scenarios
  - Identify features of deep learning techniques
  - Identify features of the Transformer architecture
- 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 Azure Machine Learning capabilities
  - Describe capabilities of automated machine learning
  - Describe data and compute services for data science and machine learning
  - Describe model management and deployment capabilities in Azure Machine Learning

### 3. Describe features of computer vision workloads on Azure (15–20%)

- Identify common types of computer vision solutions
  - Identify features of image classification solutions
  - Identify features of object detection solutions
  - Identify features of optical character recognition solutions
  - Identify features of facial detection and facial analysis solutions
- Identify Azure tools and services for computer vision tasks
  - Describe capabilities of the Azure AI Vision service
  - Describe capabilities of the Azure AI Face detection service

### 4. 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
  - Describe capabilities of the Azure AI Language service
  - Describe capabilities of the Azure AI Speech service
  
- 5. Describe features of generative AI workloads on Azure (20–25%)
  - Identify features of generative AI solutions
    - Identify features of generative AI models
    - Identify common scenarios for generative AI
    - Identify responsible AI considerations for generative AI
  - Identify generative AI services and capabilities in Microsoft Azure
    - Describe features and capabilities of Azure AI Foundry
    - Describe features and capabilities of Azure OpenAI Service
    - Describe features and capabilities of Azure AI Foundry Model Catalog