

Syllabus for AI-900

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

Identify features of common AI workloads

- Identify features of content moderation and personalization workloads
- Identify computer vision workloads
- Identify natural language processing workloads
- Identify knowledge mining workloads
- Identify document intelligence 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

Describe fundamental principles of machine learning on Azure (20–25%)

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

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

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 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

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

Describe features of generative AI workloads on Azure (15–20%)

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 capabilities of Azure OpenAI Service

- Describe natural language generation capabilities of Azure OpenAI Service
- Describe code generation capabilities of Azure OpenAI Service
- Describe image generation capabilities of Azure OpenAI Service