# **AZ-900 Course outline**

### **Module 1: Cloud Concepts**

In this module, you will learn about cloud services, the types of cloud models, and the types of cloud services.

### Lessons

- Why Cloud Services
- Types of Cloud models
- Types of Cloud services

After completing this module, students will be able to:

- Define cloud computing and its key advantages.
- Explain public, private, and hybrid cloud models.
- Explain laaS, PaaS, and SaaS cloud services.

### **Module 2: Core Azure Services**

In this module, you learn about Azure core cloud architectural components, Azure services and products, Azure solutions, and Azure management tools.

### Lessons

- Core Azure Architectural components
- Core Azure Services and Products
- Azure Solutions
- Azure management tools

Lab: Walkthrough: Create a virtual machine

**Lab**: Walkthrough: Deploy Azure container instances

Lab: Walkthrough: Create a virtual network

Lab: Walkthrough: Create blob storage

Lab: Walkthrough: Create a SQL database

Lab: Waltkthrough: Implement an Azure IoT Hub

**Lab: Walkthrough: Implement Azure Functions** 

Lab: Walkthrough: Create a web app

Lab: Walkthrough: Create a VM with a Template

Lab: Walkthrough: Create a VM with PowerShell

Lab: Walkthrough: Create a VM with CLI

After completing this module, students will be able to:

- Identify core Azure architectural components, such as regions, geographies, and resource groups.
- Identify usage cases for Azure core services and products, such as virtual machines and storage.
- Identify usage cases for Azure solutions, such as the Internet of Things and Machine Learning.
- Identify what Azure management tools are available such as Azure PowerShell and the CLI.

# **Module 3: Security, Privacy, Compliance, and Trust**

In this module, you learn about Azure security, identity, governance, monitoring, reporting, and standards.

#### Lessons

- Secure network connectivity
- Core Azure identity services
- Security tools and features
- Azure governance methodologies
- Monitoring and reporting
- Privacy, compliance, and data protection standards

Lab: Walkthrough: Secure network traffic

Lab: Walkthrough: Implement Azure key vault

Lab: Walkthrough: Create an Azure Policy

Lab: Walkthrough: Manage access with RBAC

**Lab : Walkthrough: Manage resource locks** 

Lab: Walkthrough: Implement resource tagging

Lab: Walkthrough: Exploring the Trust Center

After completing this module, students will be able to:

- Describe virtual network security connectivity options such as Network Security Groups.
- Describe Azure identity authentication and authorization options.
- Describe usage cases for the Security Center, Key vault, threat and information protection options.
- Describe Azure policies and role-based access control.
- Describe usage cases for Azure Monitor and Azure Service Health.
- Describe privacy, compliance, and data protection standards.

# **Module 4: Azure Pricing and Support**

In this module, you will learn about Azure subscriptions, planning and managing costs, support options, SLAs, and service lifecycles.

### Lessons

- Azure subscriptions
- Planning and managing costs
- Azure support options
- Azure Service Level Agreements (SLAs)
- Service lifecycle in Azure

Lab: Walkthrough: Use the Azure Pricing Calculator

Lab: Walkthrough: Use the Azure TCO Calculator

Lab: Walkthrough: Open a Support request

Lab: Walkthrough: Calculate composite SLAs

**Lab: Walkthrough: Access Azure Preview features** 

After completing this module, students will be able to:

- Use an Azure subscription.
- Plan and manage costs.
- Explain Azure support options.
- Describe Azure SLAs.
- Explain Azure service lifecycles.