Module Title	:	AZ-900T00-A: Microsoft Azure Fundamentals
Duration	:	2 days

Overview

This two-day course will provide foundational level knowledge on cloud concepts; core Azure services; security, privacy, compliance, and trust; and Azure pricing and support. Note: This course provides an Azure pass and time for students to participate in hands-on labs. If you do not need hands-on experience, consider the AZ-900T01: Microsoft Azure Fundamentals (1 day) course. The content for both courses align to the AZ-900 exam objective domain.

Audience profile

This course is suitable for IT personnel who are just beginning to work with Azure. This audience wants to learn about our offerings and get hands-on experience with the product. This course primarily uses the Azure portal to create services and does not require scripting skills. Students in this course will gain confidence to take other role-based courses and certifications, such as Azure Administrator. This course provides an Azure pass and optional lab environment. This course combines lecture, demonstrations, and hands-on labs. This course will also help prepare someone for the AZ-900 exam.

Prerequisites

There are no prerequisites for taking this course. However, the more technical knowledge a student has the more they will understand about the cloud.

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 IaaS, 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.