

# AZ-900T00: Microsoft Azure Fundamentals

**Duration: 8 Hours (1 Day)**

## Overview

Embark on your journey to cloud mastery with our AZ-900T01: Microsoft Azure Fundamentals (1 day) course. This essential training provides a foundational understanding of Cloud concepts, including the benefits and service models like IaaS, PaaS, and SaaS. Dive into Azure architecture and services, exploring core components, compute, networking, and storage capabilities. Enhance security acumen with lessons on Azure's identity services and governance methodologies. Learn cost management strategies and delve into Azure's pricing, ensuring you're well-versed in the AZ 900 certification cost considerations. Hands-on labs offer practical experience, cementing your knowledge for real-world application. Perfect for beginners, this az 900 bootcamp is your stepping stone to becoming Azure-certified, opening doors to advanced cloud opportunities.

## Audience Profile

The AZ-900T01: Microsoft Azure Fundamentals course is tailored for those new to Azure, looking to understand cloud concepts and services.

- IT beginners seeking foundational cloud knowledge
- Professionals transitioning to cloud-based solutions
- Project managers overseeing cloud technology projects
- Technical sales associates providing cloud solution advice
- Business analysts aiming to understand cloud service offerings
- Students and educators in IT-related fields
- IT decision-makers exploring the potential of Azure for their organizations
- Developers and software engineers interested in cloud services
- System administrators aiming to manage cloud infrastructures
- IT professionals looking for certification in Azure fundamentals

## Course Syllabus

### Skills at a glance

- Describe cloud concepts (25–30%)
- Describe Azure architecture and services (35–40%)
- Describe Azure management and governance (30–35%)
- Describe cloud concepts (25–30%)

### Describe cloud computing

- Define cloud computing
- Describe the shared responsibility model
- Define cloud models, including public, private, and hybrid
- Identify appropriate use cases for each cloud model
- Describe the consumption-based model
- Compare cloud pricing models
- Describe serverless

## **Describe the benefits of using cloud services**

- Describe the benefits of high availability and scalability in the cloud
- Describe the benefits of reliability and predictability in the cloud
- Describe the benefits of security and governance in the cloud
- Describe the benefits of manageability in the cloud

## **Describe cloud service types**

- Describe infrastructure as a service (IaaS)
- Describe platform as a service (PaaS)
- Describe software as a service (SaaS)
- Identify appropriate use cases for each cloud service type (IaaS, PaaS, and SaaS)
- Describe Azure architecture and services (35–40%)

## **Describe the core architectural components of Azure**

- Describe Azure regions, region pairs, and sovereign regions
- Describe availability zones
- Describe Azure datacenters
- Describe Azure resources and resource groups
- Describe subscriptions
- Describe management groups
- Describe the hierarchy of resource groups, subscriptions, and management groups

## **Describe Azure compute and networking services**

- Compare compute types, including containers, virtual machines, and functions
- Describe virtual machine options, including Azure virtual machines, Azure Virtual Machine Scale Sets, availability sets, and Azure Virtual Desktop
- Describe the resources required for virtual machines
- Describe application hosting options, including web apps, containers, and virtual machines
- Describe virtual networking, including the purpose of Azure virtual networks, Azure virtual subnets, peering, Azure DNS, Azure VPN Gateway, and ExpressRoute
- Define public and private endpoints

## **Describe Azure storage services**

- Compare Azure Storage services
- Describe storage tiers
- Describe redundancy options
- Describe storage account options and storage types
- Identify options for moving files, including AzCopy, Azure Storage Explorer, and Azure File Sync
- Describe migration options, including Azure Migrate and Azure Data Box

## **Describe Azure identity, access, and security**

- Describe directory services in Azure, including Microsoft Entra ID and Microsoft Entra Domain Services
- Describe authentication methods in Azure, including single sign-on (SSO), multi-factor authentication (MFA), and passwordless
- Describe external identities in Azure, including business-to-business (B2B) and business-to-customer (B2C)
- Describe Microsoft Entra Conditional Access
- Describe Azure role-based access control (RBAC)
- Describe the concept of Zero Trust
- Describe the purpose of the defense-in-depth model
- Describe the purpose of Microsoft Defender for Cloud
- Describe Azure management and governance (30–35%)

## **Describe cost management in Azure**

- Describe factors that can affect costs in Azure
- Compare the pricing calculator and the Total Cost of Ownership (TCO) Calculator
- Describe cost management capabilities in Azure
- Describe the purpose of tags

## **Describe features and tools in Azure for governance and compliance**

- Describe the purpose of Microsoft Purview in Azure
- Describe the purpose of Azure Policy
- Describe the purpose of resource locks

## **Describe features and tools for managing and deploying Azure resources**

- Describe the Azure portal
- Describe Azure Cloud Shell, including Azure Command-Line Interface (CLI) and Azure PowerShell
- Describe the purpose of Azure Arc
- Describe infrastructure as code (IaC)
- Describe Azure Resource Manager (ARM) and ARM templates

## **Describe monitoring tools in Azure**

- Describe the purpose of Azure Advisor
- Describe Azure Service Health
- Describe Azure Monitor, including Log Analytics, Azure Monitor alerts, and Application Insights