

# Microsoft Certified: Azure Fundamentals

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### Overview

SecureNinja's Microsoft Certified Azure Fundamentals training and certification Bootcamp in Washington, DC is an opportunity for candidates to gain foundational knowledge of cloud services and how those services are provided using Microsoft Azure. By obtaining this certification, candidates will be able to prove their knowledge of cloud concepts, services, workloads, security, and privacy in Azure, as well as Azure pricing and support.

### Topics Covered

SecureNinja's Microsoft Certified Azure Fundamentals training and certification Bootcamp will provide you with the knowledge to describe:

- Cloud concepts
- Core Azure services
- Core solutions and management tools on Azure
- General security and network security features
- Identity, governance, privacy, and compliance features
- Azure cost management and Service Level Agreements

**Our expert instructors will provide you with the tools you need to pass the AZ-900: Microsoft Azure Fundamentals Exam and prepare you for your Microsoft expert journey.**

### Audience Profile

This certification is intended for candidates who are just beginning to work with cloud-based solutions and services or are new to Azure. If you're familiar with cloud computing but have virtually no experience with Azure itself, this course is for you.

Candidates should be familiar with the general technology concepts, including concepts of networking, storage, compute, application support, and application development.

This course is designed for Students, Administrators, Business Users, Developers, and Technology Managers.

### Benefits

Our course essentially takes you from little to no knowledge about Azure to be able to pass this exam with about 10 hours of preparation!

Azure AZ-900 skilled IT experts earn more than their counterparts who are not. By taking this course you can take up more duties in your current job, especially when your organization uses cloud computing.

By adding the AZ-900 certification to your qualifications, your value as an asset to a company is increased from gaining proficiency in Azure. You could use the knowledge from this course to stand out among your counterparts who do not.

The career path for Microsoft Azure Fundamentals, AZ-900, will always be in high demand due to how popular Microsoft applications are in business and for personal use. These applications are fairly easy to learn and apply to various businesses.

## Required Exam + Details

# Exam AZ-900: Microsoft Azure Fundamentals

Questions: 40-60

Passing score: 700

Duration: 85 minutes

No prerequisites

## Describe Cloud Concepts (20-25%)

- Identify the benefits and considerations of using cloud services
- Identify the benefits of cloud computing, such as: High Availability, Scalability, Elasticity, Agility, and Disaster Recovery
- Identify the differences between Capital Expenditure (CapEx) and Operational Expenditure (OpEx)
- Describe the consumption-based model
- Describe the differences between categories of cloud services
- Describe the shared responsibility model, Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), serverless computing, Software-as-a-Service (SaaS)
- Identify a service type based on a use case
- Describe the differences between types of cloud computing
- Define cloud computing
- Describe Public cloud, Private cloud, Hybrid cloud
- Compare and contrast the three types of cloud computing

## Describe Core Azure Services (15-20%)

- Describe the core Azure architectural components
- Describe the benefits and usage of: Regions and Region Pairs, Availability Zones, Resource Groups, Subscriptions, Management Groups, Azure Resource Manager
- Explain Azure resources
- Describe core resources available in Azure
- Describe the benefits and usage of: Virtual Machines, Azure App Services, Azure Container Instances (ACI), Azure Kubernetes Service (AKS), Windows Virtual Desktop, Virtual Networks, VPN Gateway, Virtual Network peering, ExpressRoute, Container (Blob) Storage, Disk Storage, File Storage, storage tiers, Cosmos DB, Azure SQL Database, Azure Database for MySQL, Azure Database for PostgreSQL, SQL Managed Instance, Azure Marketplace

### **Describe core solutions and management tools on Azure (10-15%)**

- Describe core solutions available in Azure
- Describe the benefits and usage of: Internet of Things (IoT) Hub, IoT Central, and Azure Sphere, Azure Synapse Analytics, HDInsight, and Azure Databricks, Azure Machine Learning, Cognitive Services, and Azure Bot Service, serverless computing solutions that include Azure Functions and Logic Apps. Azure DevOps, GitHub, GitHub Actions, and Azure DevTest Labs
- Describe Azure management tools
- Describe functionality and usage of: the Azure Portal, Azure PowerShell, Azure CLI, Cloud Shell, and Azure Mobile App, Azure Advisor, Azure Resource Manager (ARM) templates, Azure Monitor, Azure Service Health

### **Describe general security and network security features (10-15%)**

- Describe Azure security features, basic features of Azure Security Center, including policy compliance, security alerts, secure score, and resource hygiene
- Describe the functionality and usage of: Key Vault, Azure Sentinel, Azure Dedicated Hosts
- Describe Azure network security, the concept of defense in depth
- Describe the functionality and usage of: Network Security Groups (NSG), Azure Firewall, Azure DDoS protection

### **Describe identity, governance, privacy, and compliance features (20- 25%)**

- Describe core Azure identity services
- Explain the difference between authentication and authorization
- Define Azure Active Directory
- Describe the functionality and usage of: Azure Active Directory, Conditional Access, Multi-Factor Authentication (MFA), and Single Sign-On (SSO) Describe Azure governance features, Role-Based Access Control (RBAC), resource locks, tags, Azure Policy, Azure Blueprints
- Describe the Cloud Adoption Framework for Azure, privacy and compliance resources, Microsoft core tenets of Security, Privacy, and Compliance, purpose of the Microsoft Privacy Statement, Product Terms site, and Data Protection Addendum (DPA)
- Describe the purpose of the Trust Center, Azure compliance documentation, Azure Sovereign Regions (Azure Government cloud services and Azure China cloud)

services)

### **Azure cost management and Service Level Agreements (10- 15%)**

- Describe methods for planning and managing costs
- Identify factors that can affect costs (resource types, services, locations, ingress, and egress traffic)
- Identify factors that can reduce costs (reserved instances, reserved capacity, hybrid use benefit, spot pricing)
- Describe the functionality and usage of: Pricing calculator and the Total Cost of Ownership (TCO) calculator, Azure Cost Management Describe Azure Service Level Agreements (SLAs) and service lifecycles
- Describe the purpose of an Azure Service Level Agreement (SLA)
- Identify actions that can impact an SLA (i.e. Availability Zones)
- Describe the service lifecycle in Azure (Public Preview and General Availability)