

# **Microsoft Azure Fundamental (AZ-900)**

This course will provide foundational level knowledge of cloud services and how those services are provided with Microsoft Azure. The course can be taken as an optional first step in learning about cloud services and Microsoft Azure, before taking further Microsoft Azure or Microsoft cloud services courses.

The course will cover general cloud computing concepts as well as general cloud computing models and services such as Public, Private and Hybrid cloud and Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS).

It will also cover some core Azure services and solutions, as well as key Azure pillar services concerning security, privacy, compliance and trust. It will finally cover pricing and support services available with Azure.

#### **Course Duration:**

22 Hr.

#### No of Classes:

• 14 Classes

#### **Course Material:**

- Lectures (PDF)
- Lab Manual (PDF)
- Recoded Video

### What You'll Learn:

- Understand general cloud computing concepts
- Understand core services available with Microsoft Azure
- Understand security, privacy, compliance and trust with Microsoft Azure
- Understand pricing and support models available with Microsoft

### **Prerequisites**

• There are no pre-requisites for taking this course. Technical IT experience is not required however some general IT knowledge or experience would be beneficial.

# **Course Syllabus**

### **Module 1 - Cloud Concepts**

- Describe Infrastructure-as-a-Service (iaas)
- Describe Platform-as-a-Service (paas)
- Describe Software-as-a-Service (saas)
- Compare and contrast the three different service types
- Describe public cloud
- Describe private cloud
- Describe hybrid cloud
- Compare and contrast the three different cloud models



### **Module 2 - Core Azure architectural components**

- Describe Regions
- Describe Availability Zones
- Describe Resource Groups
- Describe Azure Resource Manager
- Describe the benefits and usage of core Azure architectural components

#### **Module 3 - Core Azure Services**

- Describe products available for Compute such as VM, Scale Set
- Describe products available for Networking such as VNet , LB,CDN,VPN
- Describe products available for Storage such as Blob Storage
- Describe products available for Databases such as Cosmos DB, Azure SQL
- Describe the Azure Marketplace and its usage scenarios

### Module 4 - Solutions available on Azure

- Describe Internet of Things (iot)
- Describe Big Data and Analytics and products hdinsight, and Azure Databricks
- Describe Artificial Intelligence (AI) and products
- Describe Serverless computing and Azure products Azure Functions
- Describe devops solutions available on Azure such as Azure devops and Azure devtest Labs
- Describe the benefits and outcomes of using Azure solutions

### **Module 5: Azure management tools**

- Describe Azure tools such as Azure Portal, Azure powershell, Azure CLI and Cloud Shell
- Describe Azure Advisor

### **Module 6 - Security, Privacy, Compliance and Trust**

- Securing network connectivity in Azure
- Core Azure Identity services
- Security tools and features like Azure Security Center, Key Vault
- Azure governance methodologies like Azure Policy, RBAC, Lock ,Advisor
- Monitoring and Reporting in Azure like Azure Monitor



• Privacy, Compliance and Data Protection standards in Azure like GDPR, ISO, Trust center, Compliance Manager

## **Module 7 - Azure Pricing and Support**

- Azure subscriptions
- Planning and managing costs with (TCO) calculator and Pricing calculator
- Support options available with Azure
- Azure Service Level Agreements (SLAs)
- Service lifecycle in Azure like public and private preview features , General Availability (GA)
- How to monitor feature updates and product changes

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