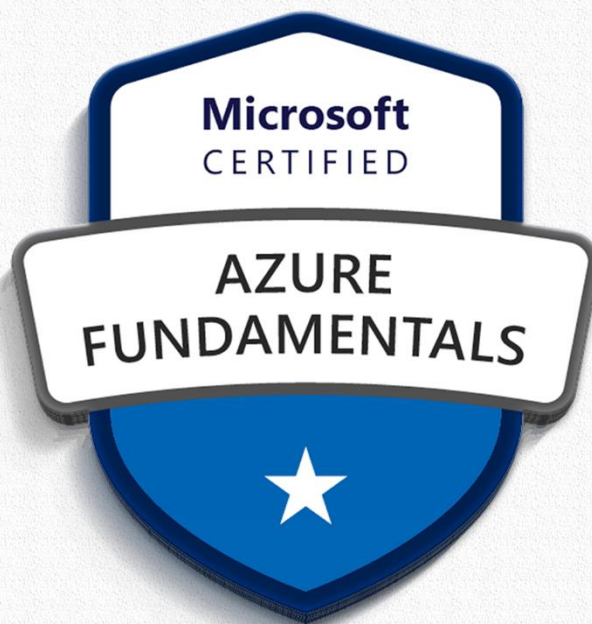


# Microsoft Certified Azure Fundamentals

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## About the Course

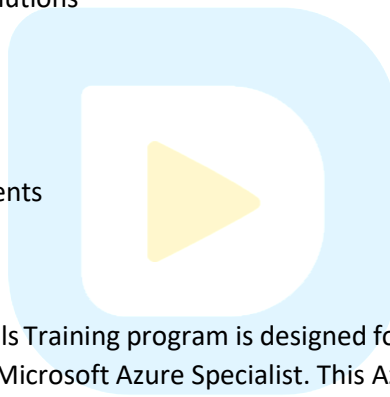
The Microsoft Certified Azure Fundamentals Training Program makes you proficient in developing, planning, and scaling your web applications on Microsoft Azure. It includes training on core Azure services; core solutions and management tools on Azure; general security and network security features; identity, governance, privacy, and compliance features; and Azure cost management and Service Level Agreements.

The curriculum has been designed by Microsoft MVPs & Industry expert to earn Microsoft Azure Developer Associate Certification (AZ-900). You can check the examination details and certification cost at [Azure Fundamentals AZ-900](#)

## Course objective

At the completion of this course, attendees will be able to;

- Describe Cloud Concepts
- Describe Microsoft Azure Cloud platform
- Understand Azure Global Infra
- Describe Core Azure Services & Solutions
- Use Management tools for Azure
- Describe Security & Compliance
- Understand Cost Management
- Understand Service Level Agreements



## Who can do this course?

The Microsoft Certified Azure Fundamentals Training program is designed for the IT professionals who want to pursue a career in Cloud Computing and become Microsoft Azure Specialist. This Azure course is a best fit for:

- IT Professionals/Application Developers
- .Net Developers
- Solutions Architects
- DevOps Engineers

## Pre-requisites

There are no pre-requisites for Microsoft Certified Azure Fundamentals Training program.

## Tools/SDK/IDE

Azure Portal, PowerShell and Azure CLI

# Course Curriculum

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## Module 1

### Introduction to Cloud Computing

- What is Cloud Computing?
- What are Cloud Services?
- Why Cloud Services?

### Categories of Cloud Services

- Infrastructure-as-a-Service (IaaS)
- Platform-as-a-Service (PaaS)
- Software-as-a-Service (SaaS)
- Server less Computing

### Types of Cloud Computing

- Public Cloud
- Private Cloud
- Hybrid Cloud

### Cloud Concepts

- High Availability, Scalability, Elasticity
- Agility, and Disaster Recovery
- Capital Expenditure (CapEx) vs. Operational Expenditure (OpEx)



## Module 2

### Azure Architectural Components

- Regions and Region Pairs
- Availability Zones
- Resource Groups
- Subscriptions
- Management Groups
- Azure resources
- Azure Resource Manager

### Core Azure Resources

- Virtual Machines, Azure App Services, and Windows Virtual Desktop
- Azure Container Instances (ACI), and Azure Kubernetes Service (AKS)
- Virtual Networks, VPN Gateway, Virtual Network peering, and ExpressRoute
- Container(Blob) Storage, Disk Storage, File Storage, and Storage tiers
- Cosmos DB, Azure SQL Database, and SQL Managed Instance
- Azure Database for MySQL, Azure Database for PostgreSQL
- Azure Marketplace

## **Module 3**

### Core Azure Solutions

- 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
- Azure Functions, and Logic Apps
- Azure DevOps, GitHub, GitHub Actions, and Azure DevTest Labs

### Azure Management Tools

- Azure Portal, Azure PowerShell, Azure CLI, and Cloud Shell, and Azure Mobile App
- Azure Advisor
- Azure Resource Manager (ARM) templates
- Azure Monitor
- Azure Service Health

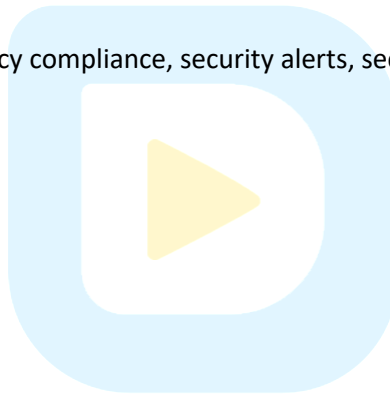
## **Module 4**

### Azure Security Features

- Azure Security Center, including policy compliance, security alerts, secure score, and resource hygiene
- Key Vault
- Azure Sentinel
- Azure Dedicated Hosts

### Azure Network Security

- Defense in depth
- Network Security Groups (NSG)
- Azure Firewall
- Azure DDoS protection



## **Module 5**

### Azure Identity Services

- Authentication vs. Authorization
- Azure Active Directory
- Conditional Access, Multi-Factor Authentication (MFA), and Single Sign-On (SSO)

### Azure Governance Features

- Role-Based Access Control (RBAC)
- Resource Locks
- Tags
- Azure Policy
- Azure Blueprints
- Cloud Adoption Framework for Azure

## Privacy and Compliance Resources

- Microsoft core tenets of Security, Privacy, and Compliance
- Microsoft Privacy Statement, Online Services Terms (OST) and Data Protection Amendment (DPA)
- Trust Center
- Azure compliance documentation
- Azure Sovereign Regions (Azure Government cloud services and Azure China cloud services)

## **Module 6**

### Planning and Managing of Costs

- Identify factors that can affect costs affecting costs such as (resource types, services, ingress and egress traffic)
- Identify factors that can reduce costs (reserved instances, reserved capacity, hybrid use benefit, spot pricing)
- functionality and usage of the Pricing calculator and the Total Cost of Ownership (TCO) calculator
- Azure Cost Management

### Azure Service Level Agreements (SLAs) and Service lifecycles

- Azure Service Level Agreement (SLA)
- Identify actions that can impact an SLA (i.e. Availability Zones)
- Service Lifecycle in Azure (Public Preview and General Availability)

## **Contact Us**

- For more information about the course, visit: <http://www.dotnettricks.com/masters-program/azure-fundamentals>
- Feel free to call us at **+91 9999 123 502/03** or email us at [info@dotnettricks.com](mailto:info@dotnettricks.com)