

Capstone Projects:

Real Time Business Scenario using Azure Fundamentals



Deploy a Virtual Machine in Azure

Learn how to create, configure, and manage a Windows or Linux VM



Create a Virtual Network with Subnets

Set up a basic virtual network and define subnets to understand Azure networking



Set Up Azure Blob Storage and Upload Files

Create a storage account, a container, and upload files to Blob Storage



Implement Role-Based Access Control (RBAC)

Assign roles to users or groups to manage access to resources



Monitor Resources Using Azure Monitor

Enable monitoring and alerts for a virtual machine or web app



Estimate Costs Using the Azure Pricing Calculator

Use the Pricing Calculator to estimate the cost of hosting a sample web app with a database

AZURE FUNDAMENTALS COURSE SYLLABUS

Duration: 40 hrs

Section 1: Describe cloud computing

- What is 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

Section 2: Describe the benefits of using cloud services

- · Benefits of high availability and scalability in the cloud
- Benefits of reliability and predictability in the cloud
- · Benefits of security and governance in the cloud
- · Benefits of manageability in the cloud

Section 3: Describe cloud service types

- Description of infrastructure as a service (laas)
- Description of platform as a service (PaaS)
- Description software as a service (SaaS)
- Identify appropriate use cases for each cloud service (laaS, PaaS, SaaS)

Section 4: Describe the core architectural components of Azure

- Develop batch processing solutions by using
- 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

Section 5: Describe Azure compute and networking services

- Comparison of compute types, including container instances, virtual machines (VMs), and functions
- Describe VM options, including Azure Virtual Machines, Azure Virtual Machine Scale Sets, availability sets, and Azure Virtual Desktop
- Describe resources required for virtual machines
- Describe application hosting options, including the Web Apps feature of Azure App
- Service, containers, and virtual machines
- Describe virtual networking, including the purpose of Azure Virtual Networks, Azure virtual subnets, peering, Azure DNS, Azure VPN Gateway, and Azure ExpressRoute
- Define public and private endpoints

Section 6: Describe Azure storage services

- Comparison of Azure storage services
- Describe storage tiers
- Describe redundancy options
- Description of 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**

Section 7: Describe Azure identity, access, and security

- Describe directory services in Azure, including Microsoft Azure Active Directory (Azure AD), part of Microsoft Entra and Azure Active Directory Domain Services (Azure AD DS)
- Describe authentication methods in Azure, including single signon (SSO), multifactor authentication, and passwordless
- Describe external identities and guest access in Azure

- Describe Conditional Access in Microsoft Azure Active Directory (Azure AD), part of Microsoft Entra
- 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

Section 8: Describe cost management in Azure

- Describe factors that can affect costs in Azure
- Comparison of the Pricing calculator and the Total Cost of Ownership(TCO) calculator
- Describe the Azure Cost Management and Billing tool
- Describe the purpose of tags

Section 9: Describe features and tools in Azure for governance and compliance

- Describe the purpose of Azure Blueprints
- Describe the purpose of Azure Policy
- Describe the purpose of resource locks
- Describe the purpose of the Service Trust Portal

Section 10: Describe features and tools for managing and deploying Azure resources

- Describe the Azure portal
- Describe Azure Cloud Shell, including Azure CLI and Azure **PowerShell**
- Describe the purpose of Azure Arc
- Describe Azure Resource Manager and Azure Resource Manager templates (ARM templates)

Section 11: 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

Section 12: Security

- Manage Keys
- Manage Secrets
- Manage Certificates
- Data Encryption
- Azure Key Vault

SKILLS AND TOOLS

Tools Covered

Azure CLI

Azure Portal

Azure **PowerShell** **Azure Resource** Manager



Azure Pricing



Azure Moniter



Azure Advisor



Azure Active Directory



Calculator







Skills Covered

Cloud Services



Access Management



Understand Azure Regions



Azure Governance



Security



Compliance and Privacy



Network Security



Monitoring



Earn your AZ 900 Course **Completion Certificate**

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WHAT OUR TRAINEE SAYS?



4.7 *******

The trainer explained cloud concepts clearly with real-life examples, making it easy to understand for beginners. Practice sessions and doubt clearing were really helpful for building a strong foundation.



Nirosha

The course was well-structured with handson labs for each topic, which improved my practical skills. The trainer's guidance on managing Azure resources and services was excellent.



Karthik M

 $5.0 \star \star \star \star \star$

The sessions focused on design patterns, architecture scenarios, and case studies that matched the exam syllabus. The instructor made complex concepts simple with diagrams and live use cases.



Srinivasan

4.9

The training covered pipelines, CI/CD, and DevOps practices in a very practical way. Tools like Azure DevOps and GitHub Actions were taught with real-time project examples.



Priya

4.0 ******

Security topics like IAM, Defender for Cloud, and Key Vault were explained with clarity. Lab exercises boosted my confidence to handle security tasks in a real environment.



Renuka Devi



Networking concepts like VNets, VPNs, and routing were made easy with step-bystep labs. The trainer's deep knowledge and support throughout the course were very helpful.

CHENNAI

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