

# Azure Infrastructure with Security Course

**Course Duration: 32 Hours**

**Course code: AZIS-101**

## 1. Course Overview

This course provides in-depth knowledge of Microsoft Azure infrastructure and security practices. It covers core services like virtual machines, networking, storage, identity management, and advanced security tools. Learners will gain hands-on experience in deploying, managing, and securing cloud environments using Azure best practices.

## 2. What You'll Learn

- Azure core infrastructure (VMs, storage, networking)
- Virtual networks, load balancers, and connectivity solutions
- Identity and access management using Azure AD
- Implementing Azure security tools (NSG, Firewall, Defender)
- Monitoring and managing Azure resources
- Backup, disaster recovery, and compliance strategies
- Securing cloud applications and data

## 3. Target Audience

- IT Professionals and System Administrators
- Cloud Engineers and Architects
- Network and Security Engineers
- DevOps Engineers
- Beginners aiming to build a career in cloud computing

## 4. Pre-Requisites

- Basic understanding of networking concepts
- Familiarity with operating systems (Windows/Linux)
- Basic knowledge of cloud computing (preferred but not mandatory)
- Understanding of security fundamentals (optional)

## 5. Course Content

### Module 1: Introduction to Azure

- Azure Architecture and Services
- Azure Portal and Resource Management

### Module 2: Azure Compute Services

- Virtual Machines
- App Services and Containers

### Module 3: Azure Networking

- Virtual Networks and Subnets
- VPN Gateway and ExpressRoute
- Load Balancer and Application Gateway

### Module 4: Azure Storage

- Blob, File, Queue, and Table Storage
- Storage Security and Access Control

### Module 5: Identity & Access Management

- Azure Active Directory
- RBAC (Role-Based Access Control)
- Multi-Factor Authentication

### Module 6: Azure Security

- Network Security Groups (NSG)
- Azure Firewall and DDoS Protection
- Microsoft Defender for Cloud

## **Module 7: Monitoring & Management**

- Azure Monitor and Log Analytics
- Alerts and Diagnostics

## **Module 8: Backup & Disaster Recovery**

- Azure Backup
- Azure Site Recovery

## **Module 9: Governance & Compliance**

- Azure Policy
- Cost Management and Security Compliance

