



AZURE SECURITY

Complete Course Content + Quiz

INTRODUCTION

- Azure Security focuses on protecting cloud resources, data, identities, networks, and applications hosted on Microsoft Azure. This course covers core Azure security concepts, tools, and best practices required for Cloud Security Engineer, SOC Analyst, and Azure Security roles. Azure security follows the Shared Responsibility Model, where Microsoft and customers both play important roles.



OBJECTIVES

- After completing this course, learners will be able to:
 - Understand Azure security architecture
 - Implement identity and access security
 - Secure networks and data
 - Monitor and respond to security incidents
 - Understand compliance and governance in Azure
 - Prepare for Azure Security (AZ-500) level roles



WHO SHOULD LEARN AZURE SECURITY

- Cloud Computing learners Cyber Security students SOC / Blue Team professionals Azure Administrators Cloud Security Engineer a s p i r a n t s



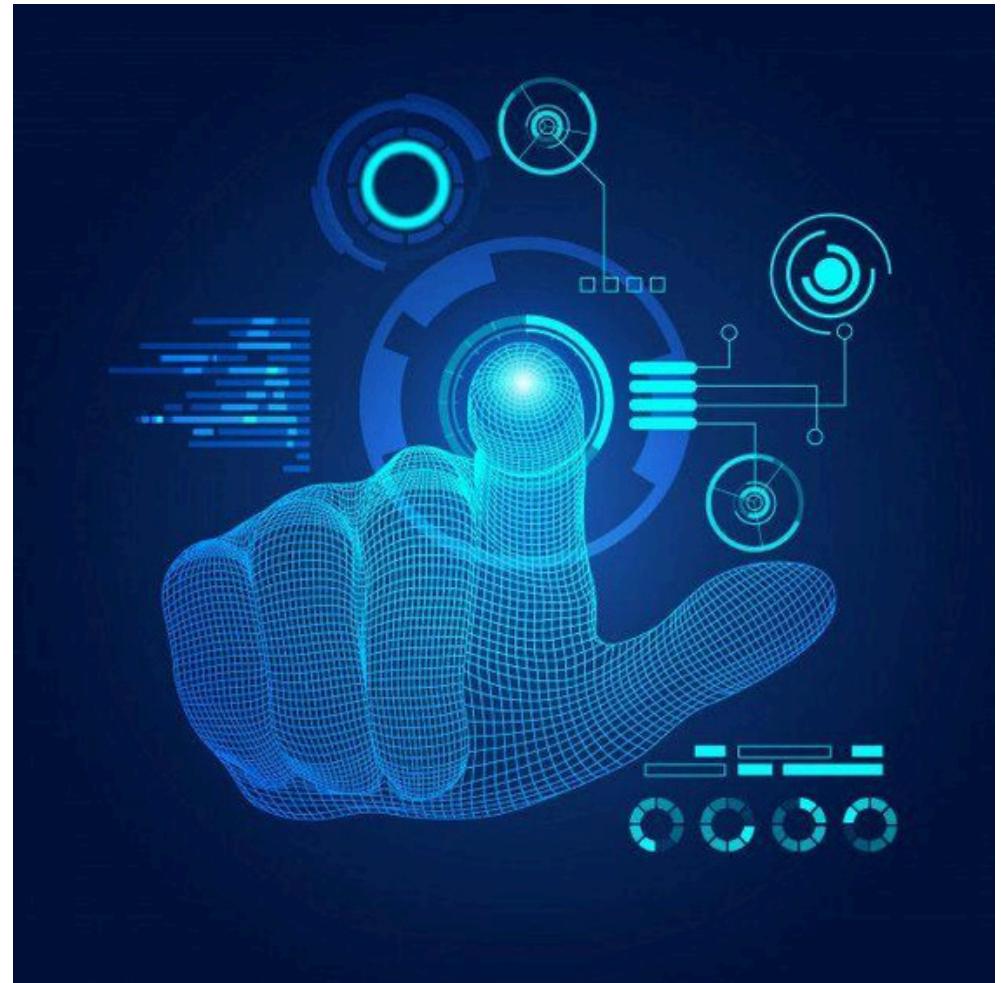


MODULE 1 AZURE SHARED RESPONSIBILITY MODEL

What is Shared Responsibility Model? Microsoft (Security OF the Cloud): Physical data centers Network infrastructure Hypervisor Customer (Security IN the Cloud): Data protection Identity and access Network configurations Application security

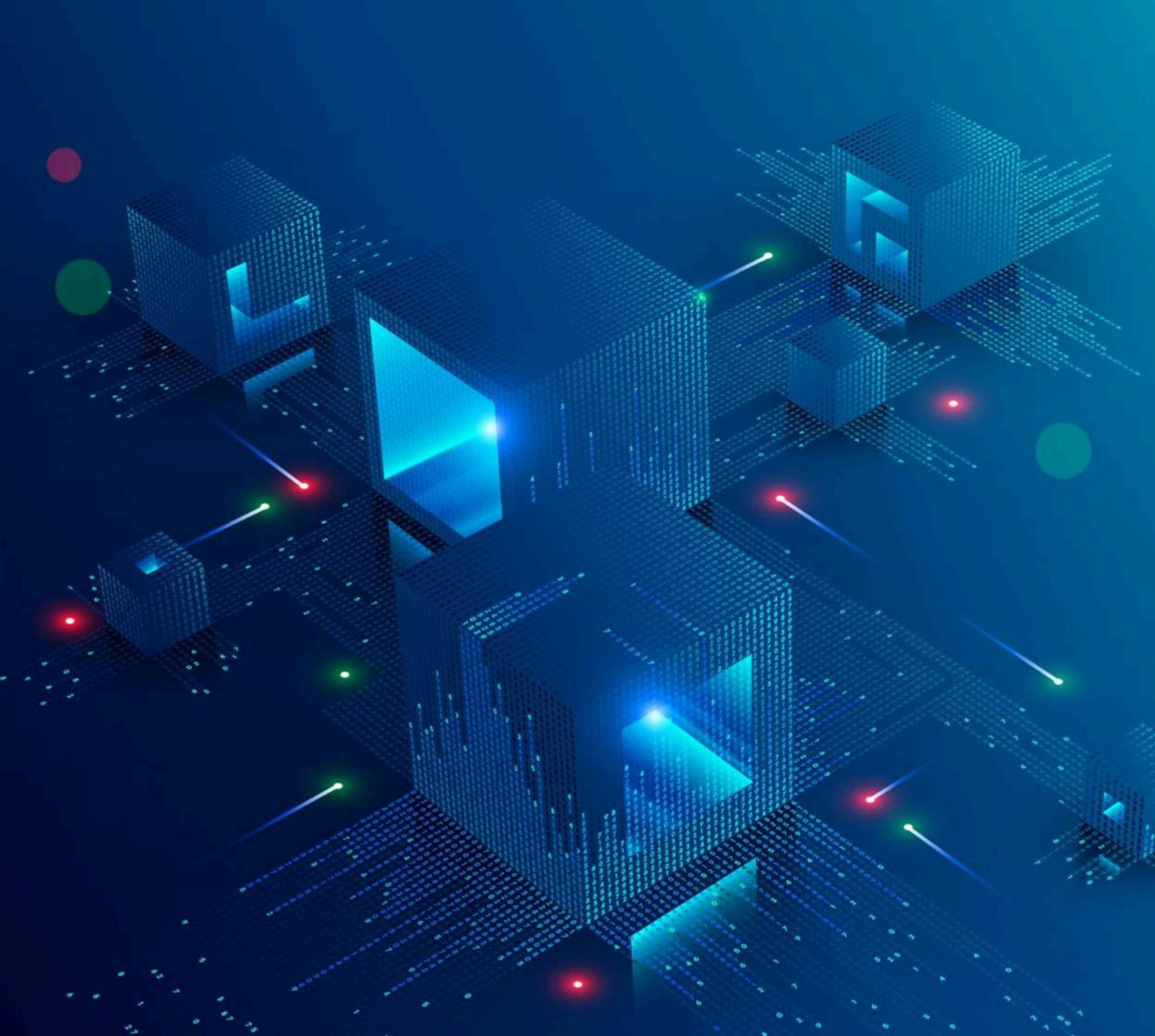
MODULE 2 AZURE IDENTITY & ACCESS MANAGEMENT

- Azure Active Directory (Azure AD) Azure AD manages:
 - User identities
 - Authentication
 - Authorization
 - Key Identity Concepts
 - Users and Groups
 - Roles
 - Role-Based Access Control (RBAC)
 - Least privilege identity Security Best Practices
 - Enable Multi-Factor Authentication (MFA)
 - Use RBAC
 - Monitor sign-in activity



MODULE 3 AZURE NETWORK SECURITY

- Azure VirtualNetwork (Vnet)A private network for Azure resources.Network Security ComponentsNetwork Security Groups (NSGs)Azure FirewallApplication Security GroupsAzure DDoS ProtectionNetwork Security Best PracticesRestrict inbound accessUse private endpointsSegment networks



MODULE 4 AZURE DATA SECURITY

- Data States Data at Rest Data in Transit Data Protection Techniques Encryption Azure Key Vault Secure access policies Azure Storage Security Private storage accounts Encryption enabled Access keys protection



MODULE 5AZURE KEY VAULT

- What is Azure Key Vault? Azure Key Vault securely stores secrets like certificates, keys, and access tokens. Benefits include centralized secret management, secure access, audit logging, and integration with other Azure services.



MODULE 6AZURE SECURITY MANAGEMENT TOOLS

- Microsoft Defender for Cloud Security posture management Threat protection Security recommendations Azure Security Center (Concept) Continuous assessment Secure score



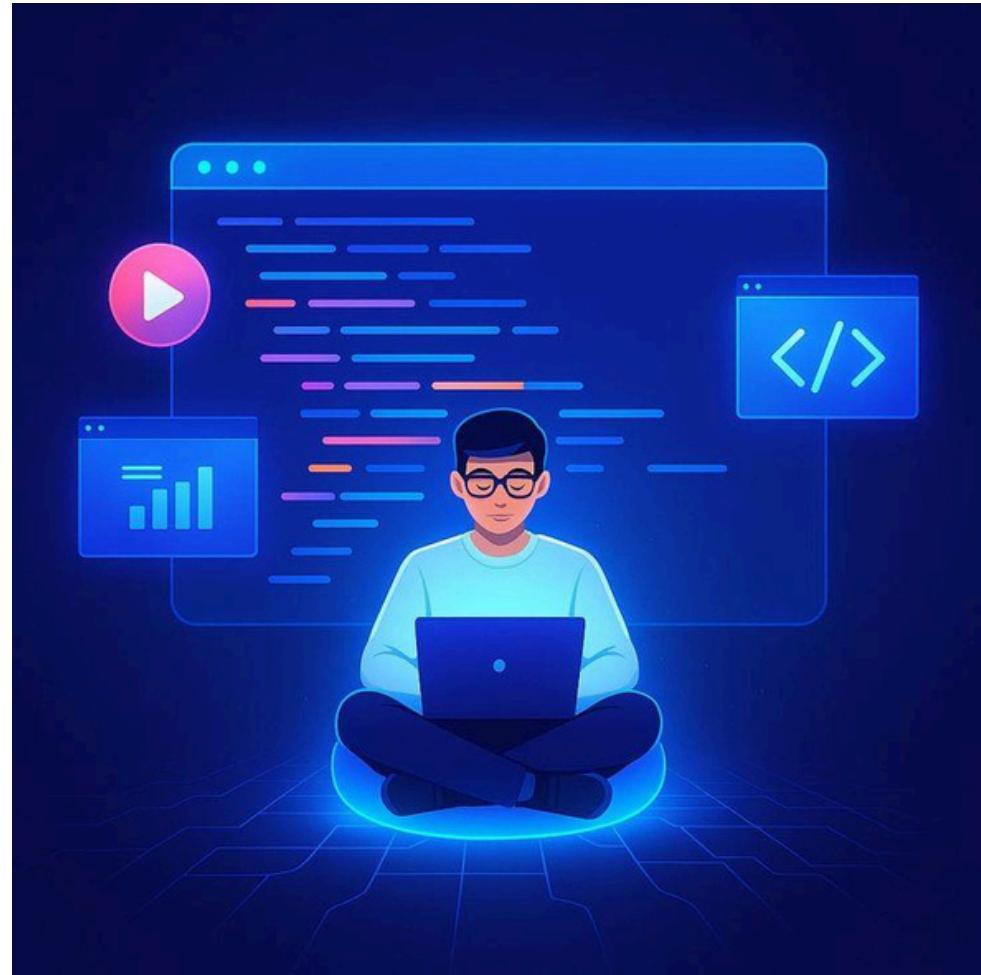
MODULE 7 LOGGING, MONITORING & THREAT DETECTION

- Azure Monitor Collects logs and metrics
- Azure Sentinel (SIEM) Cloud-native SIEM
- Threat detection and response
- Use Cases
- Alert monitoring
- Incident investigation
- SOC operations



MODULE 8 INCIDENT RESPONSE IN AZURE

- Incident Response
Steps: Detection, Analysis, Containment, Eradication, Recovery, Documentation.
Azure Tools for Incident Response: Azure Monitor, Azure Sentinel, Activity logs.



MODULE 9AZURE GOVERNANCE & COMPLIANCE

- Governance Tools Azure
Policy Management Groups Resource
Locks Compliance Concepts Data
Privacy Regulatory Standards Auditing



MODULE 10 APPLICATION SECURITY IN AZURE

- Application Security Measures Secure APIs Managed identities Secret management Web Application Protection Azure Web Application Firewall (WAF) HTTPS enforcement



MODULE 11 AZURE SECURITY BEST PRACTICES

Enable MFA for all users
Use least privilege access
Encrypt sensitive data
Continuous monitoring
Regular security reviews



MODULE 12 CAREER PATH IN AZURE SECURITY

- Job Roles: Azure Security Engineer, Cloud Security Analyst, SOC Analyst, DevSecOps Engineer, Skills Required: Azure fundamentals, Networking knowledge, Security concepts, Incident handling





Cod@virus

FINAL NOTE

- Azure Security is essential for protecting modern cloud infrastructure. Strong security practices ensure confidentiality, integrity, availability, and compliance.

AZURE SECURITY QUIZ QUESTIONS (MCQs)

• Q1. Azure Security mainly focuses on:

- A. Microsoft only
- B. Customer only
- C. Both Microsoft and customer
- D. Government

Answer: B

Q2. In Azure shared responsibility model, who secures customer data?

- A. Microsoft only
- B. Customer only
- C. Both Microsoft and customer
- D. Government

Answer: C

AZURE SECURITY QUIZ QUESTIONS (MCQs)

Q3. RBAC is used for:

- A. Backup
- B. Monitoring
- C. Access control
- D. Networking

Answer: C

Q4. Which service provides secret management in Azure?

- A. Azure Monitor
- B. Azure Firewall
- C. Azure Key Vault
- D. Azure Policy

Answer: C

AZURE SECURITY QUIZ QUESTIONS (MCQs)

Q5. NSG is used to:

- A. Store data
- B. Control network traffic
- C. Manage users
- D. Monitor costs

Answer: B

Q6. Azure Sentinel is:

- A. Antivirus
- B. Firewall
- C. SIEM solution
- D. Load balancer

Answer: C

Q7. Which tool provides security recommendations in Azure?

Answer: Microsoft Defender for Cloud

AZURE SECURITY QUIZ QUESTIONS (MCQs)

Q8. Data encrypted while moving over network is called:

Answer: Data in transit

Q9. Azure WAF protects against:

Answer: Web attacks

Q10. AZ-500 is related to:

Answer: Azure Security