

AZ-900: Microsoft Azure Fundamentals – Detailed Syllabus

1. Cloud Concepts (20–25%)

- Principles of cloud computing
- Shared responsibility model
- IaaS, PaaS, SaaS models
- Public, Private & Hybrid cloud
- Benefits of cloud (scalability, elasticity, fault tolerance, agility)
- Consumption-based model

2. Core Azure Services (15–20%)

- Azure architecture components
- Azure regions, region pairs, availability zones
- Resource groups & resource hierarchy
- Compute services (VMs, App Services, Functions)
- Storage services (Blob, Disk, File, Queue)
- Networking basics (VNet, Subnets, VPN Gateway, ExpressRoute)

3. Azure Core Solutions & Management Tools (10–15%)

- Azure IoT services (IoT Hub, IoT Central)
- AI & ML services (Cognitive Services)
- Serverless computing (Functions, Logic Apps)
- DevOps & GitHub tools
- Azure Portal, Azure PowerShell & CLI
- ARM Templates, Bicep basics

4. Identity, Security, Privacy & Compliance (25–30%)

- Azure AD fundamentals
- RBAC (Role-Based Access Control)
- Zero-Trust Model
- Authentication vs Authorization
- Azure Security Center (Defender for Cloud)
- Microsoft Privacy, Compliance, GDPR

5. Azure Pricing & Support (15–20%)

- Azure subscriptions
 - Cost Management & Billing
 - Pricing calculator
 - SLA, service lifecycle
 - Azure support plans
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AZ-104: Microsoft Azure Administrator – Detailed Syllabus

1. Manage Azure Identities & Governance (15–20%)

- Managing Azure AD users, groups, roles
- Hybrid identity (Azure AD Connect, SSO)
- Implementing RBAC
- Managing subscriptions & governance
- Tags & resource locks
- Azure Policy, Blueprints

2. Implement & Manage Storage (10–15%)

- Storage accounts: types, performance tiers
- Blob storage, lifecycle management
- File shares (Azure Files, File Sync)
- Managed disks & snapshots
- Encryption, SAS tokens, access keys

3. Deploy & Manage Azure Compute Resources (25–30%)

- Virtual Machines: sizing, availability sets, scale sets
- VM networking, backups, and extensions
- Azure App Services (Web Apps, Containers)
- Serverless computing: Functions, Logic Apps
- Container Instances (ACI), Kubernetes basics (AKS)

4. Configure & Manage Virtual Networking (30–35%)

- VNets, subnets, IP addressing
- Network security groups (NSGs)
- Azure Firewall & Bastion
- VPN Gateway, VNet peering
- Load balancers (Layer 4 & Layer 7)
- Application Gateway & WAF
- DNS zones & private endpoints

5. Monitor & Backup Azure Resources (10–15%)

- Azure Monitor & Alerts
 - Log Analytics
 - Network Watcher
 - Azure Backup (VM Recovery Services Vault)
 - Site Recovery (ASR)
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AZ-500: Microsoft Azure Security Engineer – Detailed Syllabus

1. Manage Identity & Access (30–35%)

- Azure AD Identity Protection
- Conditional Access Policies
- MFA Implementation
- Privileged Identity Management (PIM)
- Certificate-based authentication
- External identities & B2B/B2C
- Zero Trust identity enforcement

2. Implement Platform Protection (15–20%)

- Network security (NSG, ASG, Azure Firewall, DDoS Protection)
- Application Security Groups
- Just-in-Time (JIT) access
- Security baselines for IaaS workloads
- VM security: extensions, endpoint protection

3. Manage Security Operations (25–30%)

- Azure Defender for Cloud (workload protection)
- Threat detection & analytics
- Security alerts & auto-response
- Security posture management (CSPM)
- Azure Sentinel (SIEM/SOAR)
- Log Analytics & incident investigation

4. Secure Data & Applications (25–30%)

- Key Vault secrets, certificates, and keys
 - Data encryption (at rest, in transit)
 - Transparent Data Encryption (TDE)
 - Storage security: SAS, keys, private endpoints
 - App registration & API permissions
 - Secure containers & AKS security
 - Web App Firewall (WAF)
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