

## Course duration

- 4 days

## Course Benefits

- Secure identities with Azure Active Directory and users and groups.
- Implement identity solutions spanning on-premises and cloud-based capabilities
- Apply monitoring solutions for collecting, combining, and analyzing data from different sources.
- Manage subscriptions, accounts, Azure policies, and Role-Based Access Control.
- Administer Azure using the Resource Manager, Azure portal, Cloud Shell, and CLI.
- Configure intersite connectivity solutions like VNet Peering, and virtual network gateways.
- Administer Azure App Service, Azure Container Instances, and Kubernetes.

Microsoft Certified Partner

Webucator is a Microsoft Certified Partner for Learning Solutions (CPLS). This class uses official Microsoft courseware and will be delivered by a Microsoft Certified Trainer (MCT).

## Course Outline

1. Introduction to Azure
  1. Subscriptions and accounts
  2. Resource groups and templates in Azure Resource Manager
2. Azure global infrastructure
  1. Azure regions
  2. Azure Availability Zones
  3. Comparison with AWS
3. Implement Azure Active Directory
  1. Introduction to Azure Active Directory
  2. Domains and custom domains
  3. Safety features
  4. Guest users in Azure Active Directory
  5. Manage multiple directories
  6. Comparison with AWS
4. Implement and manage hybrid identities
  1. Introduction to Azure AD Connect
  2. Comparison with AWS

5. Implement virtual networking
  1. Azure Virtual Network and VNet peering
  2. VPN and ExpressRoute connections
  3. Comparison with AWS
6. Implement VMs for Windows and Linux
  1. Configure high availability
  2. Comparison with AWS
7. Implement load balancing and network security
  1. Implement Azure Load Balancer
  2. Implement an Azure Application Gateway
  3. Implement Azure Firewall
  4. Implement network security groups and application security groups
  5. Comparison with AWS
8. Implement container-based applications
  1. Configure Azure Kubernetes Service
  2. Publish a solution on an Azure Container Instance
  3. Comparison with AWS
9. Implement an application infrastructure
  1. Create an App Service plan
  2. Create and configure Azure App Service
  3. Configure networking for an App Service
  4. Introduction to Logic Apps and Azure Functions
  5. Comparison with AWS
10. Implement storage accountsIn this module, you'll be introduced to Azure Storage and how to configure network access, replication, authentication, access, and failover.Lessons
  1. Azure Storage core concepts
  2. Managing the Azure Blob storage lifecycle
  3. Working with Azure Blob storage
  4. Comparison with AWS
11. Implement NoSQL databases
  1. Introduction to Azure Cosmos DB
  2. Consistency
  3. Select appropriate CosmosDB APIs
  4. Set up replicas in CosmosDB
  5. Comparison with AWS DynamoDB
12. Implement Azure SQL databases
  1. Configure Azure SQL database settings
  2. Implement Azure SQL Database managed instances
  3. Configure high availability for an Azure SQL database
  4. Comparison with AWS
13. Implement cloud infrastructure monitoring
  1. Monitor security
  2. Monitor cost
  3. Configure a Log Analytics workspace
  4. Comparison with AWS
14. Implement and manage Azure governance solutions

1. Assign RBAC roles
2. Configure management access to Azure
3. Implement and configure an Azure Policy
4. Comparison with AWS
15. Manage security for applications
  1. Implement Azure Key Vault
  2. Implement and configure Azure AD Managed Identities
  3. Register and manage applications in Azure AD
  4. Comparison with AWS
16. Migration, backup, and disaster recovery management
  1. Migrate workloads
  2. Implement Azure Backup for VMs
  3. Implement disaster recovery
  4. Comparison with AWS

## Class Materials

Each student will receive a comprehensive set of materials, including course notes and all the class examples.

### Class Prerequisites

Experience in the following *is required* for this Azure class:

- Experience (>1year) as an AWS Architect designing secure and scalable AWS cloud solutions across storage structures, compute, networking, and the interaction with external resources/services.
- Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.
- Understanding of network configuration, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of Active Directory concepts, including domains, forests, domain controllers, replication, Kerberos protocol, and Lightweight Directory Access Protocol (LDAP).
- Understanding of resilience and disaster recovery, including backup and restore operations.
- Understanding of programming fundamentals and use of a scripting language.

Experience in the following *would be useful* for this Azure class:

- Familiarity with Azure administration, Azure development processes, and DevOps processes.