Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Microsoft Azure technologies for AWS Architects

CODE:	LENGTH:	PRICE:
MCS_AZ-030T00	32 Hours (4 days)	€2,290.00

Description

This course teaches Solutions Architects who have previously designed for Amazon Web Services how to translate business requirements into secure, scalable, and reliable solutions for Azure. Lessons include virtualization, automation, networking, storage, identity, security, data platform, and application infrastructure. This course outlines how decisions in each theses area affects an overall solution

Objectives

After completing this course, students will be able to:
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.

Audience

This course is for AWS Cloud Architects with expertise in designing and implementing solutions running on AWS who now want to design for Microsoft Azure.

Prerequisites

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.
Candidates will benefit from familiarity with Azure administration, Azure development processes, and DevOps processes.

Programme

Module 1: Introduction to AzureIn this module, youâ€™ll learn about how Azure organizes subscriptions and accounts, and you can set up resource groups and templates to standardize creation and life-cycle management of your resources.Lessons
Subscriptions and accounts
Resource groups and templates in Azure Resource Manager
After completing this module you will be able to:
Determine the type of account and subscription best suited to your solution.
Create resource groups and templates to standardize and manage solutions.
Module 2: Azure global infrastructureIn this module, youâ€™ll see the worldwide architecture of Microsoft Azure and how that architecture affects the availability and reliability of your applications and sites.Lessons
Azure regions
Azure Availability Zones
Comparison with AWS

After completing this module you will be able to:
Implement an architecture that provides the availability and reliability required by your solution.
Module 3: Implement Azure Active DirectoryIn this module, you will learn how to secure identities with Azure Active Directory, and implement users and groups.Lessons
Introduction to Azure Active Directory
Domains and custom domains
Safety features
Guest users in Azure Active Directory
Manage multiple directories
Comparison with AWS
After completing this module you will be able to:
Secure identities with Azure Active Directory.
Implement users and groups.
Module 4: Implement and manage hybrid identitiesIn this module, you will learn how to extend your on-premise Active Directory accounts to the cloud, and how to sync the accounts.Lessons
Introduction to Azure AD Connect
Comparison with AWS
After completing this module you will be able to:
Use your on-premise Active Directory account to authenticate to your cloud solution.
Sync accounts between on-premise and the cloud.
Module 5: Implement virtual networkingIn this module, you will learn about basic virtual networking concepts like virtual networks and subnetting, IP addressing, Azure DNS, network security groups, and Azure Firewall.Lessons
Azure Virtual Network and VNet peering
VPN and ExpressRoute connections
Comparison with AWS
After completing this module you will be able to:
Design virtual networks with security in mind.
Module 6: Implement VMs for Windows and LinuxIn this module, you will learn how to configure VMs for high availability and how to deploy and configure scale sets.Lessons
Configure high availability
Comparison with AWS
After completing this module you will be able to:
Implement VMs to create high availability solutions.
Deploy and configure scale sets.
Module 7: Implement load balancing and network securityIn this module, you will learn how to implement Azure Load Balancer, and how to set up security groups.Lessons
Implement Azure Load Balancer
Implement an Azure Application Gateway
Implement Azure Firewall
Implement network security groups and application security groups
Comparison with AWS
After completing this module you will be able to:
Implement the components of load balancing.
Set up network and application security groups.
Module 8: Implement container-based applicationsIn this module, you will learn how to configure the Azure Kubernetes Service and how to publish a solution on an Azure container.Lessons
Configure Azure Kubernetes Service
Publish a solution on an Azure Container Instance
Comparison with AWS
After completing this module you will be able to:
Configure Azure Kubernetes Service for your solution.
Publish your solution on an Azure Container Instance.
Module 9: Implement an application infrastructureIn this module, youâ€™ll learn the basics of selecting an App Service plan, configuring your plan, and setting up Logic Apps and Azure Functions.Lessons
Create an App Service plan
Create and configure Azure App Service
Configure networking for an App Service
Introduction to Logic Apps and Azure Functions
Comparison with AWS
After completing this module you will be able to:
Select an App Service plan suitable for your solution.
Configure the App Service.
Incorporate Logic Apps and Azure Functions into your solution.
Module 10: Implement storage accountsIn this module, youâ€™ll be introduced to Azure Storage and how to configure network access, replication, authentication, access, and failover.Lessons
Azure Storage core concepts
Managing the Azure Blob storage lifecycle
Working with Azure Blob storage
Comparison with AWS

After completing this module you will be able to:
Select an appropriate Azure Storage account for your solution.
Configure your storage account.
Module 11: Implement NoSQL databasesIn this module, you will learn about Azure Cosmos DB and how to configure it.Lessons
Introduction to Azure Cosmos DB
Consistency
Select appropriate CosmosDB APIs
Set up replicas in CosmosDB
Comparison with AWS DynamoDB
After completing this module you will be able to:
Configure a NoSQL database solution by using Azure Cosmos DB.
Module 12: Implement Azure SQL databasesIn this module, you will learn how to implement managed instances of Azure SQL database and how to configure it for high availability.Lessons
Configure Azure SQL database settings
Implement Azure SQL Database managed instances
Configure high availability for an Azure SQL database
Comparison with AWS
After completing this module you will be able to:
Implement managed instances of Azure SQL database.
Configure your database for high availability.
Module 13: Implement cloud infrastructure monitoringIn this module, you will learn how to use Azure Monitor to set alerts and how to log and manage costs.Lessons
Monitor security
Monitor cost
Configure a Log Analytics workspace
Comparison with AWS
After completing this module you will be able to:
Set up security monitoring for your solution.
Monitor costs by analyzing logs.
Module 14: Implement and manage Azure governance solutionsIn this module, you will learn how to configure role-based access control and how to configure Azure Policy to force compliance with governance requirements.Lessons
Assign RBAC roles
Configure management access to Azure
Implement and configure an Azure Policy
Comparison with AWS
After completing this module you will be able to:
Configure RBAC roles for governance access.
Configure an Azure Policy to enforce compliance with governance requirements.
Module 15: Manage security for applicationsIn this module, you will learn how to implement and configure KeyVault, how to register and manage application in Azure Active Directory, and how to configure Azure Active Directory Managed Identities.Lessons
Implement Azure Key Vault
Implement and configure Azure AD Managed Identities
Register and manage applications in Azure AD
Comparison with AWS
After completing this module you will be able to:
Register your app in Azure Active Directory.
Configure Azure Active Directory for managed identities used by your app to access data.
Module 16: Migration, backup, and disaster recovery managementIn this module, you will learn how to migrate workloads, and now to manage backup, disaster recovery, and updates.Lessons
Migrate workloads
Implement Azure Backup for VMs
Implement disaster recovery
Comparison with AWS
After completing this module you will be able to:
Migrate workloads to the cloud and across VMs.
Implement cloud backups.
Implement disaster recovery options.
Implement update strategies that avoid negative impacts to availability and performance.

Session Dates

On request. Please contact us

Additional Information

This training is also available as onsite training. Please contact us to find out more.