



Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Skontaktuj się z nami

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Microsoft Azure Architect Technologies

Kod: **Czas trwania:** **Cena netto:**

MCS_AZ-303T00 40 Hours (5 days) zł5,100.00

Description

This course teaches Solutions Architects how to translate business requirements into secure, scalable, and reliable solutions. Lessons include virtualization, automation, networking, storage, identity, security, data platform, and application infrastructure. This course outlines how decisions in each of these areas affects an overall solution.

Cel szkolenia

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.

Uczestnicy

This course is for IT Professionals with expertise in designing and implementing solutions running on Microsoft Azure. They should have broad knowledge of IT operations, including networking, virtualization, identity, security, business continuity, disaster recovery, data platform, budgeting, and governance. Azure Solution Architects use the Azure Portal and as they become more adept they use the Command Line Interface. Candidates must have expert-level skills in Azure administration and have experience with Azure development processes and DevOps processes.

Wymagania wstępne

Successful Azure Solution Architects start this role with experience on operating systems, virtualization, cloud infrastructure, storage structures, and networking.

- 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.

Program szkolenia

Course Outline

Module 1: Implement VMs for Windows and Linux In this module, you will learn about Azure virtual machines including planning, creating, availability and extensions. This module includes:

- Lessons
- Select Virtual Machine Size
- Configure High Availability
- Implement Azure Dedicated Hosts
- Deploy and Configure Scale Sets
- Configure Azure Disk Encryption

After completing this module, students will be able to:

- Plan for virtual machine implementations.
- Create virtual machines.
- Configure virtual machine availability, including scale sets.
- Understand High Availability options for VMs in Azure

Module 2: Automate Deployment and Configuration of Resources In this module, you will learn about the tools an Azure Administrator uses to manage their infrastructure. This includes the Azure Portal, Cloud Shell, Azure PowerShell, CLI, and Resource Manager Templates. This module includes:

- Lessons
- Azure Resource Manager Templates
- Save a Template for a VM
- Evaluate Location of New Resources
- Configure a Virtual Hard Disk Template
- Deploy from a Template
- Create and Execute an Automation Runbook

After completing this module, students will be able to:

- Leverage Azure Resource Manager to organize resources.

Use ARM Templates to deploy resources.Create and Execute an Automation RunbookDeploy an Azure VM from a VHD
Understand Azure encryption technologies

Module 3: Implement Virtual NetworkingIn this module, you will learn about basic virtual networking concepts like virtual networks and subnetting, IP addressing, network security groups, Azure Firewall, and Azure DNS. Lessons

Virtual Network PeeringImplement VNet PeeringAfter completing this module, students will be able to:

Connect services with Virtual Network PeeringConfigure VNet PeeringUnderstand Service ChainingModify or delete VNet Peering

Module 4: Implement Load Balancing and Network SecurityIn this module, you will learn about network traffic strategies including

network routing and service endpoints, Azure Load Balancer, Azure Application Gateway, and Traffic Manager.Lessons

Implement Azure Load BalancerImplement an Application GatewayUnderstand Web Application FirewallImplement Azure Firewall

Implement Azure Front DoorImplementing Azure Traffic Manager

Implement Network Security Groups and Application Security GroupsImplement Azure Bastion

After completing this module, students will be able to:Select a Load Balancer solutionConfigure Application Gateway

Implement Azure FirewallCreate an Azure Front DoorUnderstand Traffic Manager routing methods

Configure Network Security Groups (NSGs)

Module 5: Implement Storage AccountsIn this module, you will learn about basic storage features including storage accounts, blob storage, Azure files and File Sync, storage security, and storage tools. Lessons

Storage AccountsBlob StorageStorage SecurityManaging StorageAccessing Blobs and Queues using AAD

Configure Azure Storage Firewalls and Virtual NetworksAfter completing this module, students will be able to:

Understand Storage Account services and typesConfigure Blob storage, accounts, containers, and access tiers

Implement Shared Access SignaturesUnderstand Azure Storage firewalls and virtual networks

Module 6: Implement Azure Active DirectoryIn this module, you will learn how to secure identities with Azure Active Directory, and implement users and groups. Lessons

Overview of Azure Active DirectoryUsers and GroupsDomains and Custom DomainsAzure AD Identity Protection

Implement Conditional AccessConfigure Fraud Alerts for MFAImplement Bypass OptionsConfigure Trusted IPs

Configure Guest Users in Azure ADManage Multiple DirectoriesAfter completing this module, students will be able to:

Understand how Multiple AAD organizations interactAdd Guest Users to Azure ADConfigure Location Condition Configuration

Configure Azure MFA settingsImplement Conditional Access Azure MFA

Module 7: Implement and Manage Azure GovernanceIn this module, you will learn about managing your subscriptions and accounts, implementing Azure policies, and using Role-Based Access Control.Lessons

Create Management Groups, Subscriptions, and Resource GroupsOverview of Role-Based Access Control (RBAC)

Role-Based Access Control (RBAC) RolesAzure AD Access ReviewsImplement and Configure an Azure PolicyAzure Blueprints

After completing this module, students will be able to:Understand Resource Group OrganizationUnderstand how RBAC works

Create an Azure AD access reviewCreate and manage policies to enforce complianceCreate a Blueprint

Module 8: Implement and Manage Hybrid IdentitiesIn this module, you will learn how to install and configure Azure AD Connect and implement Azure AD Connect Health.Lessons

Install and Configure Azure AD ConnectConfigure Password Sync and Password WritebackConfigure Azure AD Connect Health

After completing this module, students will be able to:Implement Azure AD seamless Single Sign-On

Perform an Azure AD Connect installationImplement Azure AD Connect Health

Module 9: Manage Workloads in AzureIn this module, you will learn how to migrate workloads using Azure Migrate, perform

VMware agent-based and agent-less migrations, and perform Azure Backup and Azure Site Recovery.Lessons

Migrate Workloads using Azure MigrateVMware - Agentless MigrationVMware - Agent-Based MigrationImplement Azure Backup

Azure to Azure Site RecoveryImplement Azure Update ManagementAfter completing this module, students will be able to:

Understand agent-based migration architecturePrepare for Azure for migrationPrepare an on-premises VMware environment

Understand Azure VM backup architectureManage updates and patches for Azure VMs

Module 10: Implement Cloud Infrastructure MonitoringIn this module, you will learn about Azure Monitor, Azure Workbooks, Azure Alerts, Network Watcher, Azure Service Health, Azure Application Insights.Lessons

Azure Infrastructure Security MonitoringAzure MonitorAzure WorkbooksAzure AlertsLog AnalyticsNetwork Watcher

Azure Service HealthMonitor Azure CostsAzure Application InsightsUnified Monitoring in Azure

In this module, you will learn how to Module 11: Manage Security for ApplicationsIn this module, you will learn about Azure Key

Vault and implementing authentication using Azure Managed Identities.Lessons

Azure Key VaultAzure Managed IdentityAfter completing this module, students will be able to:

Explain Key Vault uses such as secrets, key, and Certificate managementUse Managed Identities with Azure resources

Module 12: Implement an Application InfrastructureIn this module, you will learn how to create an App Service web App for

Containers, create and configure an App Service Plan, and create and manage Deployment Slots.Lessons

Create and Configure Azure App ServiceCreate an App Service Web App for ContainersCreate and Configure an App Service Plan

Configure Networking for an App ServiceCreate and Manage Deployment SlotsImplement Logic AppsImplement Azure Functions

After completing this module, students will be able to:Configure an Azure App ServiceCreate an App Service Plan

Create a Workflow using Azure Logic AppsCreate a Function App

Module 13: Implement Container-Based ApplicationsIn this module, you will learn how to run Azure Container instances and how to deploy Kubernetes with AKS.Lessons

Azure Container InstancesConfigure Azure Kubernetes ServiceAfter completing this module, students will be able to:

Run Azure Container instancesDeploy Kubernetes with AKS

Module 14: Implement NoSQL DatabasesIn this module, you will learn about Azure Table Storage and recommend options for CosmosDB APIs.Lessons

Configure Storage Account TablesSelect Appropriate CosmosDB APIsAfter completing this module, students will be able to:

Outline the Table Service Data ModelUnderstand options for Azure Cosmos DBUnderstand high availability using CosmosDB

Module 15: Implement Azure SQL DatabasesIn this module, you will create an Azure SQL Database single database, create an

Azure SQL Database Managed Instance, and review high-availability and Azure SQL database.Lessons

Configure Azure SQL Database SettingsImplement Azure SQL Database Managed Instances

High-Availability and Azure SQL DatabaseAfter completing this module, students will be able to:
Create an Azure SQL Database single databaseCreate an Azure SQL Database Managed Instance
Recommend high-availability architectural models used in Azure SQL Database

Terminy

Na żądanie. [Prosimy o kontakt](#)

Dodatkowe informacje

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