



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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**Sie erreichen uns unter**

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# AZ-700T00 Designing and Implementing Microsoft Azure Networking Solutions

**CODE:**

MCS\_AZ-700T00

**LÄNGE:**

24 Hours (3 Tage)

**PREIS:**

€1,790.00

**Description**

This course teaches Network Engineers how to design, implement, and maintain Azure networking solutions. This course covers the process of designing, implementing, and managing core Azure networking infrastructure, Hybrid Networking connections, load balancing traffic, network routing, private access to Azure services, network security and monitoring. Learn how to design and implement a secure, reliable, network infrastructure in Azure and how to establish hybrid connectivity, routing, private access to Azure services, and monitoring in Azure.

**Zielgruppe**

This course is for Network Engineers looking to specialize in Azure networking solutions. An Azure Network engineer designs and implements core Azure networking infrastructure, hybrid networking connections, load balance traffic, network routing, private access to Azure services, network security and monitoring. The azure network engineer will manage networking solutions for optimal performance, resiliency, scale, and security.

**Voraussetzungen**

Successful Azure Network Engineers start this role with experience in enterprise networking, on-premises or cloud infrastructure and network security.

Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.

Understanding of network configurations, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.

Understanding of software defined networking.

Understanding hybrid network connectivity methods, such as VPN.

Understanding resilience and disaster recovery, including high availability and restore operations.

**Inhalt****Module 1: Azure Virtual Networks**

In this module you will learn how to design and implement fundamental Azure Networking resources such as virtual networks, public and private IPs, DNS, virtual network peering, routing, and Azure Virtual NAT.

**Lessons**

Azure Virtual Networks

Public IP services

public and private DNS

cross-VNet connectivity

Virtual Network Routing

Azure virtual Network NAT

Lab: Design and implement a Virtual Network in Azure

Lab: Configure DNS settings in Azure

Lab: Connect Virtual Networks with Peering

After completing this module, students will be able to:

Implement virtual networks  
 Configure public IP services  
 Configure private and public DNS zones  
 Design and implement cross-VNET connectivity  
 Implement virtual network routing  
 Design and implement an Azure Virtual Network NAT  
 Module 2: Design and Implement Hybrid Networking  
 In this module you will learn how to design and implement hybrid networking solutions such as Site-to-Site VPN connections, Point-to-Site VPN connections, Azure Virtual WAN and Virtual WAN hubs.

Lessons

- Site-to-site VPN connection
- Point-to-Site VP connections
- Azure Virtual WAN
- Lab: Create and configure a local gateway
- Create and configure a virtual network gateway
- Create a Virtual WAN by using Azure Portal
- Design and implement a site-to-site VPN connection
- Design and implement a point-to-site VPN connection
- Design and implement authentication
- Design and implement Azure Virtual WAN Resources

Module 3: Design and implement Azure ExpressRoute  
 In this module you will learn how to design and implement Azure ExpressRoute, ExpressRoute Global Reach, ExpressRoute FastPath and ExpressRoute Peering options.

Lessons

- ExpressRoute
- ExpressRoute Direct
- ExpressRoute FastPath
- ExpressRoute Peering
- Lab: Create and configure ExpressRoute
- Design and implement Expressroute
- Design and implement Expressroute Direct
- Design and implement Expressroute FastPath

Module 4: load balancing non-HTTP(S) traffic in Azure  
 In this module you will learn how to design and implement load balancing solutions for non-HTTP(S) traffic in Azure with Azure Load balancer and Traffic Manager.

Lessons

- Content Delivery and Load Blancing
- Azure Load balancer
- Azure Traffic Manager
- Azure Monitor
- Network Watcher
- Lab: Create and configure a public load balancer to load balance VMs using the Azure portal
- Lab: Create a Traffic Manager Profile using the Azure portal
- Lab: Create, view, and manage metric alerts in Azure Monitor
- Design and implement Azure Laod Balancers
- Design and implement Azure Traffic Manager
- Monitor Networks with Azure Monitor
- Use Network Watcher

Module 5: Load balancing HTTP(S) traffic in Azure  
 In this module you will learn how to design and implement load balancing solutions for HTTP(S) traffic in Azure with Azure Application gateway and Azure Front Door.

Lessons

- Azure Application Gateway
- Azure Front Door
- Lab: Create a Front Door for a highly available web application using the Azure portal
- Lab: Create and Configure an Application Gateway
- Design and implement Azure Application Gateway
- Implement Azure Front Door

Module 6: Design and implement network security  
 In this module you will learn to design and imponent network security solutions such as Azure DDoS, Azure Firewalls, Network Security Groups, and Web Application Firewall.

## Lessons

Azure DDoS Protection

Azure Firewall

Network Security Groups

Web Application Firewall on Azure Front Door

Lab: Create a Virtual Network with DDoS protection plan

Lab: Deploy and Configure Azure Firewall

Lab: Create a Web Application Firewall policy on Azure Front Door

Configure and monitor an Azure DDoS protection plan

implement and manage Azure Firewall

Implement network security groups

Implement a web application firewall (WAF) on Azure Front Door

Module 7: Design and implement private access to Azure Services

In this module you will learn to design and implement private access to Azure Services with Azure Private Link, and virtual network service endpoints.

## Lessons

Define Azure Private Link and private endpoints

Design and Configure Private Endpoints

Integrate a Private Link with DNS and on-premises clients

Create, configure, and provide access to Service Endpoints

Configure VNET integration for App Service

Lab: restrict network access to PaaS resources with virtual network service endpoints

Lab: create an Azure private endpoint

Define the difference between Private Link Service and private endpoints

Design and configure private endpoints

Explain virtual network service endpoints

Design and configure access to service endpoints

Integrate Private Link with DNS

Integrate your App Service with Azure virtual networks

## Kurstermine

Auf Anfrage. Bitte [kontaktieren Sie uns](#)

## Zusätzliche Information

Diese Schulung ist auch als Vor-Ort-Schulung verfügbar. Bitte kontaktieren Sie uns, um mehr zu erfahren.