



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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**Sie erreichen uns unter**

Arrow ECS GmbH, Elsenheimerstraße 1, 80687 München

Email: [training.ecs.de@arrow.com](mailto:training.ecs.de@arrow.com)

Phone: +49 (0)89 930 99 168



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

<b>CODE:</b>	<b>LÄNGE:</b>	<b>PREIS:</b>
MCS_AZ-700T00	24 Hours (3 Tage)	€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.