

training code: AZ-700 / ENG DL 3d / EN

# Designing and Implementing Microsoft Azure Networking Solutions

**Authorized training Microsoft** Designing and Implementing Microsoft Azure Networking Solutions **AZ-700** on-line course. This course is for:

- Administrator
- Architect
- Engineer
- Specialist



## Purpose of the training

The course teaches network engineers how to design, implement and preserve Azure platform network solutions. This course includes the process of designing, implementing and managing basic Azure platform network infrastructure, hybrid network connections, balancing overload traffic, network routing, private access to Azure platform, network security and monitoring. Find out how to design and implement secure, reliable network infrastructure on Azure platform, as well as hybrid connectivity, routing, private access to Azure platform services and monitoring on Azure platform.



## Benefits of completing the training

Designing, implementing and managing hybrid network connections

Designing and implementing basic Azure network infrastructure

Designing and implementing routing, as well as balancing overload on Azure platform

Securing and monitoring network

Designing and implementing private access to Azure services

The course is intended for network engineers who would like to become experts in Azure platform network solutions. Azure network engineer designs and implements basic Azure platform network infrastructure, hybrid network connections, overload balancing traffic, network routing, private access to

Azure platform services, network securities and monitoring. Azure network engineer będzie will be managing network solutions in order to gain optimal performance, resistance, scaling and security.



## Examination method

**On-line exam.** Record at: <https://home.pearsonvue.com/Clients/Microsoft.aspx>  
<https://www.altkomakademia.pl/vouchery-microsoft-promocja/>



## Exam description

After the AZ-700 course, you can take Microsoft certification exams:an Authorized Test Center,online being monitored by an offsite proctor. Details on the website:<https://docs.microsoft.com/pl-pl/learn/certifications/exams/az-700>



## Expected Listener Preparation

- Understanding local virtualization technologies including: virtual machines, virtual networks and virtual hard disks.
- Understanding network configuration, including TCP/IP, Domain Name System (DNS), Virtual Private Network (VPN), firewalls and coding technology.
- Understanding software-defined networks.
- Understanding hybrid network connectivity methods, such as VPN.
- Understanding resilience and Disaster Recovery including high availability operations and restoring.
- To increase the comfort of work and training's effectiveness we suggest using an additional monitor. The lack of additional monitor does not exclude participation in the training, however, it significantly influences the comfort of work during classes.



## Training Language

- **Training:** English
- **Materials:** English

## Training Includes

- manual in electronic form available on the platform:
- <https://learn.microsoft.com/pl-pl/training/>
- access to Altkom Akademia's student portal

### Training method:

- theory
- demos
- individual laboratories
- 70% theory
- 30% practice

## Duration

3 days / 21 hours

## Training agenda

### 1: Introduction to Azure virtual networks

- Be acquainted with Azure virtual platforms
- Configure public IP services
- Design name recognition for your own virtual network
- Initiate connection between virtual networks using parallel communication
- Implement traffic routing in virtual network
- Configure Internet access using Azure Virtual NAT service

### 2: Design and implement hybrid network

- Design and implement Azure VPN Gateway
- Link networks with site-to-site VPN connections
- Connect devices to network with the use of point-location VPN connections
- Link remote resources with the use of virtual WAN Azure platform networks
- Create Network Virtual Appliance (NVA) in virtual concentrator

### 3: Design and implement Azure ExpressRoute

- Be acquainted with Azure ExpressRoute service
- Design ExpressRoute implementation
- Configure parallel communication for ExpressRoute service implementation

- Connect ExpressRoute service circuit to virtual network
- Link geographical distributed networks with global range of ExpressRoute service
- Improve performance of data path between networks with the use of ExpressRoute FastPath service
- Troubleshooting ExpressRoute connection

#### 4: Balancing overload traffic different than HTTP(S) on Azure platform

- Be acquainted with overload balancing
- Design and implement Azure platform overload balancing system with the use of Azure portal
- Get to know Azure traffic Manager

#### 5: Balancing overload of HTTP(S) traffic on Azure platform

- Design Azure application gateway
- Configure Azure platform application gateway
- Design and configure Azure front door

#### 6: Design and implement network securities

- Secure your own virtual networks on Azure portal
- Implement Azure DDoS Protection service using Azure portal
- Implementing network security groups using Azure portal
- Design and implement Azure Firewall
- Working with Azure Firewall Manager
- Implement Web application on Azure Front Door platform

#### 7: Design and implement private access to Azure services

- Define usługę Private Link service and private end-point
- Explain virtual network end-points
- Integrate Private Link with DNS
- Integrate App Service with Azure platform virtual networks

#### 8: Design and implement network monitoring

- Monitor your own networks using Azure Monitor
- Monitor your own network with the use of Azure Network Watcher