GTech Learn

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Microsoft Learning Partner

Course Contents

AZ-700: Designing & Implementing Microsoft Azure Networking Solutions

Duration: **3 Days**	**Level**: **Intermediate**	**Role**: **Network Engineer**
Certification: **Available**	**Public Schedules**: View Dates	**Private Delivery:** Reach Us

What's included?

- ✓ Learn from Microsoft Certified Trainer (MCT's)
- ✓ 24x7 Lab Access
- ✓ Official Courseware
- ✓ Exam Preps / Practice Tests
- ✓ Badges & Completion Certificate
- ✓ Discounted Exam Vouchers

Microsoft CERTIFIED
AZURE NETWORK ENGINEER
ASSOCIATE

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Infrastructure
Azure
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Overview

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.

Audience Profile

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.

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.

Contents

Learning path 1: Introduction to Azure Virtual Networks

- Explore Azure Virtual Networks
- Configure Public IP addresses
- Exercise: Design and implement a Virtual Network in Azure
- Design name resolution for your Virtual Network
- Exercise: Configure DNS settings in Azure
- Enable Cross-VNet connectivity with peering
- Exercise: Connect two Azure Virtual Networks using global virtual network peering
- Implement virtual network traffic routing
- Configure internet access with Azure Virtual NAT

Learning Path 2: Design & Implement Hybrid Networking

- Design and implement Azure VPN Gateway
- Exercise – Create and configure a Virtual Network Gateway
- Connect networks with Site-to-site VPN connections
- Connect devices to networks with Point-to-site VPN connections
- Connect remote resources by using Azure Virtual WANs
- Exercise – Create a Virtual WAN by using the Azure Portal
- Create a network virtual appliance (NVA) in a virtual hub

Learning Path 3: Design & Implement Azure Express Route

- Explore Azure ExpressRoute
- Design an ExpressRoute deployment
- Exercise – Configure an ExpressRoute Gateway
- Exercise – Provision an ExpressRoute circuit
- Configure peering for an ExpressRoute deployment
- Connect an ExpressRoute circuit to a VNet
- Connect geographically
- dispersed networks with ExpressRoute Global Reach
- Improve data path performance between networks with ExpressRoute FastPath
- Troubleshoot ExpressRoute connection issues

Learning Path 4: Load Balancing non-HTTP(s) traffic

- Explore load balancing options in the Azure portal
- Design and implement Azure Load Balancer using the Azure portal
- Exercise – Create and configure an internal load balancer using the Azure portal
- Explore Azure Traffic Manager
- Exercise: Create a traffic manager profile using the Azure portal

Learning Path 5: Load Balancing HTTP(s) traffic in Azure

- Design Azure Application Gateway
- Configure Azure Application Gateway
- Exercise: Deploy Azure Application Gateway
- Design and configure Azure Front Door
- Exercise: Create a Front Door for highly available web application using the Azure portal

Learning Path 6: Design & Implement Network Security

- Get network security recommendations with Microsoft Defender for Cloud
- Deploy Azure DDoS Protection by using the Azure portal
- Exercise – Configure DDoS Protection on a virtual network
- Deploy and configure Network Security Groups
- Design and implement Azure Bastion Design and implement Azure Firewall
- Exercise – Deploy and configure Azure Firewall using the Azure portal
- Working with Azure Firewall Manager
- Exercise – Secure your virtual hub using Azure Firewall Manager
- Implement a Web Application Firewall

Learning Path 7: Design & Implement Private Access to Azure Services

- Explain Virtual Network Service Endpoints
- Define Private Link Services and Private Endpoints
- Integrate Private Endpoint with DNS
- Exercise – Restrict network access to PaaS resources with virtual network service endpoints
- Exercise – Create an Azure Private Endpoint using Azure PowerShell

Learning Path 8: Design & Implement Network Monitoring

- Monitor your networks using Azure Monitor
- Exercise – Monitor a load balancer resource using Azure Monitor
- Use Azure Network Watcher to troubleshoot and analyze your network

About GTech Learn

Established in 2011 in the USA, GTech Learn is one of the leading IT training organizations in North America & South East Asia. Driven by its unique USPs, GTech Learn is spurring competition, meeting the unmet needs of customers, assisting in skills upgrade, and supplementing talent pools with its presence in the USA, Canada, Singapore and India. This is consistent with our vision to help our Learners with skills upgrade for enhanced career opportunities.

As a Microsoft Learning Partner, we offer a broad range of learning solutions across the full Microsoft technology stack that can be customized.

Since 2011, GTech Learn has been developing custom-fit learning solutions that involve creating and delivering maximum results.

We have successfully helped all types of businesses, government entities, and individuals. For this reason, GTech has chosen by Microsoft to deliver comprehensive learning programs around the globe.

With flexible learning options, state-of-the-art delivery methods, numerous language preferences, experienced instructors, and complete dedication to our students, GTech Learn has the capabilities to help students develop their Microsoft skill sets and achieve increasingly high standards of productivity while organizations of all sizes realize the full potential of their technology investments.

Our Accreditations with Microsoft