Course Name	Azure Support Engineer Troubleshooting Azure Connectivity
Course Code	AZ-720T00
Course Duration	3 Days
Course Structure	Instructor-Led
Course Overview	Networking is essential, particularly when you have cloud-based assets. This course covers the different connectivity issues that a network engineer will typically encounter, and the troubleshooting steps to resolve these issues.
Audience Profile	As an Azure network support engineer, you understand that business data is valuable, and needs to be protected from internal and external risks. When you encounter problems with backing up or recovery, you need to know how to approach the problem. In this module, you will learn how to monitor the status of backups, review logs, and troubleshoot common issues that occur when backing up and recovering data.
Course Prerequisites	Before attending this course, students must have: • Experience with networking and with hybrid environments, including knowledge of routing, permissions, and account limits.
Course Outcome	After completing this course, students will be able to: • Troubleshoot business continuity issues. • Troubleshoot hybrid and cloud connectivity issues. • Troubleshoot Platform as a Service issues. • Troubleshoot authentication and access control issues. • Troubleshoot networks. • Troubleshoot VM connectivity issues.
Assessment/Evaluation	This course will prepare delegates to take the AZ-720: Azure Support Engineer Troubleshooting Azure Connectivity exam. Successfully passing this exam will result in the attainment of the Azure Support Engineer Troubleshooting Azure Connectivity Certification and Certificate of Attendance issued by IT-IQ Botswana.

Course Details	
Topic	**Topic 1:** Troubleshoot business continuity with Microsoft Azure Businesses rely on data and if systems fail, data backups must be reliable so that data can be recovered. This module covers some of the issues you may encounter when troubleshooting Azure backup and recovery. **Learning objectives** By the end of this module, you'll be able to: - Troubleshoot Azure backup and recovery issues. - Restart a failed backup. **Topic 2: Troubleshoot name resolution issues in Microsoft Azure** Name resolution is the process of matching the name of a computer to its network address. This module looks at name resolution issues for public networks, private networks, and internal networks that connect to Azure. **Learning objectives** By the end of this module, you will be able to: - Troubleshoot Azure internal name resolution issues. - Troubleshoot public DNS issues.

Topic 3: Troubleshoot cloud and hybrid connectivity in Microsoft Azure

Troubleshooting cloud and hybrid connectivity includes Microsoft ExpressRoute, Azure virtual networks, and Azure Virtual WAN. This module enables you to manage and troubleshoot different network configurations to support your organization's needs.

Learning objectives
By the end of this module, you'll be able to:

- Troubleshoot ExpressRoute connectivity.
- Troubleshoot site to site VPNs.
- Troubleshoot point to site VPNs.
- Troubleshoot virtual network connectivity.
- Troubleshoot virtual WAN issues.

Topic 4: Troubleshoot platform-as-a-service issues in Microsoft Azure

To benefit from Azure PaaS services, you must be able to troubleshoot connectivity issues quickly and effectively both from an on-premises user to an Azure PaaS service and between PaaS services.

Learning objectives
By the end of this module, you will be able to:

- Troubleshoot PaaS services.
- Troubleshoot PaaS integration issues.

Topic 5: Troubleshoot authentication and access control issues in Microsoft Azure

Microsoft Azure has a sophisticated authentication and access control system to provide high security. Azure Active Directory (AD) authentication includes Self-service password reset, multifactor authentication, hybrid integration, and passwordless authentication.

Learning objectives
By the end of this module, you will be able to:

- Troubleshoot Azure AD authentication.
- Troubleshoot hybrid authentication.
- Troubleshoot authorization issues.

Topic 6: Troubleshoot network security issues with Microsoft Azure

Troubleshoot network issues revolving around WAF, NSG, Azure Firewall, latency within a virtual network.

Learning objectives
By the end of this module, you will be able to:

- Troubleshoot network security issues.
- Troubleshoot NSGs
- Troubleshoot Azure Firewall
- Troubleshoot latency issues within a virtual network.

Topic 7: Troubleshoot routing, traffic control and load balancing in Microsoft Azure

Troubleshoot network issues revolving around routing and traffic control and load- balancing.

Learning objectives
By the end of this module, you will be able to:

- Troubleshoot routing and traffic control.
- Troubleshoot load-balancing issues.

	Topic 8: Troubleshoot connectivity issues with virtual machines in Microsoft Azure
	Troubleshoot deployment, connectivity, and authorization issues with Azure Bastion and just in time access to Virtual Machines.
	Learning objectives By the end of this module, you will be able to: • Choose between Azure Bastion or just in time VM access. • Troubleshoot issues with Azure Bastion • Troubleshoot just in time VM access.
	Topic 9: Troubleshoot VPN gateways in Microsoft Azure Network configuration and the use of Virtual Private Networks (VPNs) is integral to the success of collaborative working. In this module, we look at how to monitor and troubleshoot site-to-site and point-to-site VPNs.
	Learning objectives By the end of this module, you are able to: • Troubleshoot site to site VPNs. • Troubleshoot point to site VPNs.