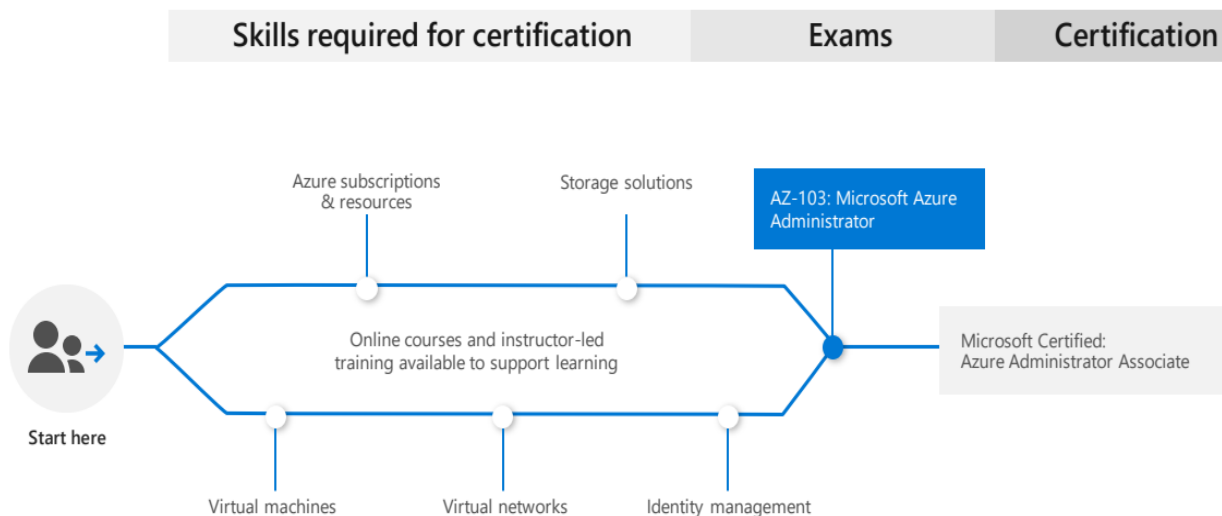


**Fundamentals | Security | Storage | VM |
Networking | PowerShell | Azure AD | SQL DB**
**10 Modules | 17 Hands-On Activity Guides | Certification | Job
Preparation**

QUOTATION AND COURSE OUTLINE

MICROSOFT AZURE ADMINISTRATOR PROFESSIONAL EXAM AZ 103- MICROSOFT AZURE ADMINISTRATOR ASSOCIATE



Course Materials

TechPledge will provide a customized set of Lecture Notes for each class scheduled along with Recorded video . You will be given a PDF file which you may make copies from, email to your participants, or make available via internal website.

Learning Path for Azure Administrator

Azure Administrator is responsible for implementing, monitoring, and maintaining Microsoft Azure solutions, including major services related to compute, storage, network, and security. A Microsoft Azure Administrator must have expertise in compute, network, storage, and security. At the TechPledge we provide the training which is always updated inline with the Azure Administrator Skills required by the industry and recommended by Microsoft. Below is the patch for training

Evolve your Azure Cloud Skills



- *Azure architecture and service guarantees*
- *Manage services with Azure portal*
- *Security, responsibility and trust in Azure*
- *Apply and monitor infrastructure standards with Azure Policy.*
- *Control and organize Azure resources with Azure Resource Manager*

Manage Resources in Azure



- *Align requirements with cloud types and service models in Azure*
- *Control Azure services with the CLI*
- *Automate Azure tasks using scripts with PowerShell*
- *Predict costs and optimize spending for Azure*
- *Control and organize Azure resources with Azure Resource Manager*

Administer Infrastructure Resource in Azure



- *Pillars of a great Azure Administration*
 - *Manage security in Azure*
 - *Manage performance and scalability in Azure*
 - *Manage for efficiency and operations in Azure*
 - *Manage for availability and recoverability in Azure*
-

Abilities Validated by the Certification

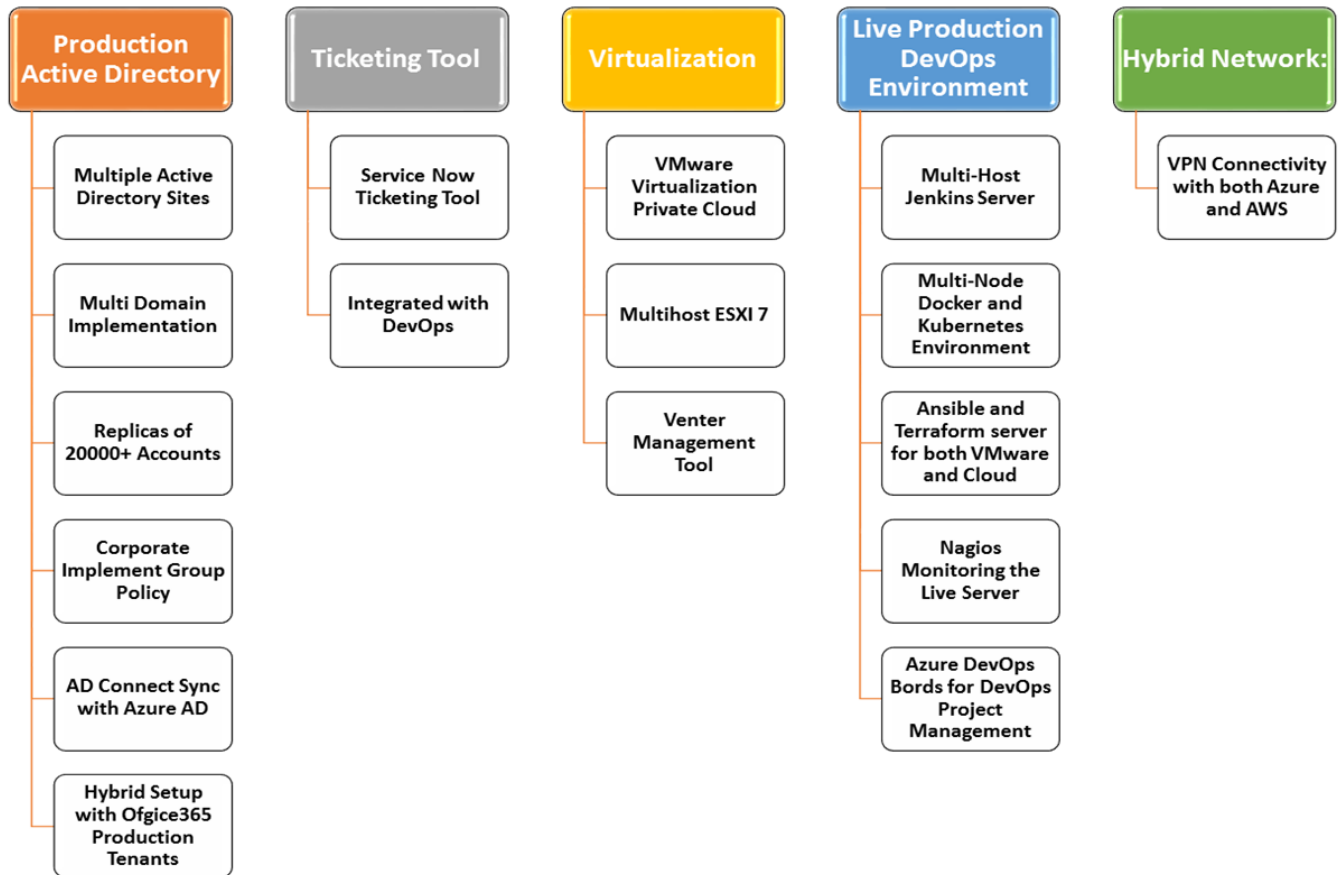
- Manage infrastructure
- Manage workloads and security
- Create and deploy apps
- Manage authentication and secure data
- Manage identity and security
- Manage a data platform solution
- Managing Azure subscriptions and resources
- Implementing and managing Azure storage
- Deployment and management of the virtual machines (VMs)
- Configuration and management of the virtual networks
- Deployment, migration, and integration

Customer Immersion – Live Production Walkthrough

6 Hours Live walkthrough the complete Azure Cloud Infrastructure Integration and Migration Process in production environment with full setup of Infrastructure Like **AD, Microsoft SQL , Microsoft Exchange, File Server , ADFS and** DevOps Tool Like **Jenkins , Ansible , Docker , AWS Code Deploy , AWS Code Pipeline , Azure Pipeline and Azure ARM** and Development Environment with Maven, Visual Studio and Python.

The Complete Setups is using **100 of PowerShell & Linux Script** with **237 CI/CD scripts** (Jason, Yamal).

Below is the High-Level Setup Outline of our Customer Immersion Production Replicas. Student will get the access of this setup at end of the course for 6 hours with AD ID and Organization Email.



Learn while doing with our Sandbox Environment



Azure Sandbox

- Connect with Azure Portal through the TechPledge Provide sandbox environment and play with it will all labs which you want to try.
- Create, destroy, and build Practical, scenario-based applications with ease. Our pre-configured, auto-provisioned servers allow you to try new skills, risk-free.



AWS Sandbox

- Connect with AWS Console through the TechPledge Provide sandbox environment and play with it will all labs which you want to try.
- Create, destroy, and build Practical, scenario-based applications with ease. Our pre-configured, auto-provisioned servers allow you to try new skills, risk-free.

Course Outline

Introduction to Cloud Computing

- Understanding Cloud Computing
- Benefit and Feature of Cloud Computing
- Explain on Platform as a Service (PaaS), SaaS, IaaS
- Cloud Trends
- Public and Private Cloud
- Principles of Parallel and Distributed Computing
- Depth explain on Virtualization
- Architecture of Cloud Computing

- Major Player on Cloud Infrastructure

Getting Start with Microsoft Azure

- Overview of Microsoft Azure
- Explains on Azure Platform
- Getting Access to Azure
- Explain on Azure Resource Manager
- Using Azure Portal
- Manage Azure using Azure Portal
- Manage Azure using Power Shell
- Understanding on Management Services
- Create and View Resources
- Explain on Azure services

Azure Virtual Machines

- Basic concept of VM
- Explanation of Service level Agreement
- Understanding of Virtual Machine Models and Components
- Deploying Azure Virtual Machine via portal and Template
- Authorizing Azure resource using Manager Template
- Setup Remote access to VM
- Explain on Classic VM
- Disk caching
- Attach and Formatting disks
- Configuring availability
- Image capture
- Creating Windows Virtual Machines
- Creating Linux Virtual Machines
- Virtual Machine Availability Set

Managing Azure Virtual Network

- Overview of Networking
- Basics of Virtual Network
- Address Spaces, subnets, DNS servers
- Create and manage Azure Virtual networks
- Understanding Network ACL and Network Security Group
- Creating Virtual Networks in Azure
- Private and Public IP
- Express Route
- Hands-on Lab: Create a VNet-to-VNet virtual network

Deploying Resources with Azure Resource Manager

- ARM Templates
- Role-Based Access Control (RBAC)
- Resource Policies
- Security
- Building Blocks
- Lab:1 Create Resource Groups

- Lab:2 Deploy an Empty Template

Building Azure IaaS-Based Server Applications

- High Availability
- Templated Infrastructure
- Domain-Connected Machines
- Lab:1 Deploy a Virtual Machine using Cli

Authoring Serverless Applications in Azure

- Understanding Web App tiers
- Resource Group and Web Hosting Plans
- Supported language
- Scaling of Websites
- Deployment source
- Horizontal and Vertical Scaling
- Production and Test Deployment Slots
- Integrated web app with Code Repository like git hub
- Using Deployment center
- Use the Visual Studio and Dot net code to Create web app
- Integration
- High Performance
- Lab:1 Create Web App

Backing Azure Solutions with Azure Storage

- Azure Storage Pricing
- Azure Storage High Availability
- Azure Manage and Unmanage Disk
- Blob Storage
- Files Storage
- Queue Storage
- Overview of StorSimple
- Lab:1 Create Blob Storage
- Lab:2 Create a VM With a Managed Disk

Azure CDN

- Introduction to CDN
- Need for CDN
- Setting up CDN on Azure

Comparing Database Options in Azure

- Relational Database
- Understanding Database as a service
- SQL Database is not SQL Server

- Advance Capabilities
- Benefits of SQL database
- Scaling SQL database
- Connect SQL Database with Visual Studio or Java
- Hands-on Lab: Deploy SQL database on Azure
- Lab:1 . Deploy a SQL Server Database Instance and Connect using Visual Studio or Java

Azure Active Directory

- Active Directory Fundamentals
- Understanding Azure Active Directory
- Need for Azure Active Directory
- Multi-Factor Authentication
- Role-based Access Control
- Lab: Create User , Groups and Assign Roles

Managing Security and Identity for Azure Solutions

- Security Monitoring
- Data Security
- Azure Active Directory (Azure AD)
- DDOS Security
- Hybrid Identity
- Azure AD Application Integration
- Lab:1 Create Azure AD and Publish Applications

Monitoring and Automating Azure Solutions

- Application Monitoring
- Platform Monitoring
- Alerting
- Backup
- Azure Automation
- Auto-Scale

Microsoft Tool

- Understanding of MAP Tool
- Azure Pricing Calculator
- Azure Bandwidth Calculator

Course Fee

Call for Price