

## Microsoft Azure Architect Technologies AZ-300 Training



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## Program Outline:

The Microsoft Azure Architect Technologies AZ-300 online training program enables an aspirant for a career as a certified Azure Cloud Solutions Architect. Learner will be able to grasp the method of managing Azure resources, configuring and deployment of virtual machines, and excel Azure Cognitive Services solutions while getting acquainted with Azure platform.

## Key Features:

- 50 hours of instructor-led training
- Exam coupon enclosed
- Projects associated with Azure labs
- Access to Microsoft Azure materials which is line with the examination
- Full time support with one to one mentoring sessions

## Delivery Mode:

Blended - Online self-paced learning and live virtual classroom

### **Prerequisites:**

- In order to learn this Azure solution architect certification course, an aspirant should have hands-on experience in various IT operations, including networking, virtualization, security.
- Proficiency in at least one of the following domains like Azure administration, Azure development, or DevOps provides an added advantage.

### **Who Should Learn:**

- IT developers.
- Cloud solution architects
- Azure administrators and developers having experience
- DevOps professionals

## Major Outcomes:

- Maintain Azure subscriptions and resources
- Configuring, deploying, and managing virtual machines and networks
- Examine and perform server migration to Azure
- Implementation and management of advanced virtual networking and application services
- Manage and secure identities
- Select, compute and storage solutions
- Carry out hybrid networking
- Examine throughput and structure of data access
- Develop web applications using PaaS
- Create apps and services running on Service Fabric
- Utilize Azure Kubernetes Service for health monitoring and maintenance
- Developing long-running tasks and distributed transactions
- Design a message-based integration architecture
- Develop for asynchronous processing and autoscaling
- Create Azure Cognitive Services solutions

#### Certification Details and Criteria:

**Certification Details -** This exam evaluates one's capability to achieve the mentioned technical tasks:

Deploy and configure infrastructure, implement workloads and security, create and deploy apps implement authentication and secure data, and develop for the cloud and Azure storage.

The AZ-300: Azure Architect Technologies Exam costs \$165.00 USD plus tax or INR 4800 plus tax. While registering for exam, fees is paid to Microsoft. The exam carries 40-60 multiple choice questions and is 150 minutes long.

### Course Curriculum:

### Lesson 01 - Quick Start

- Course Introduction
- Overview of the AZ-300 Exam Requirements
- > General Azure Exam Tips
- > Multi-Channel Learning Other Resources

#### Lesson 02 - Overview of Azure

- > From Self Hosting to Cloud Computing
- > Overview of 100 Azure Services
- > Azure Geos and Regions

### Lesson 03 - Create and Configure Virtual Machines

- > What is a Virtual Machine
- > The Azure Portal
- Create a Virtual Machine in Azure
- > Test a Virtual Machine in Azure
- > Assignment: Create a Virtual Machine
- Configure a VM for Availability
- Monitor a VM
- > Setting up Virtual Machine Scale Sets (VMSS)

## Lesson 04 - Automate Deployment of Virtual Machines

- > Working with ARM Templates, Part 1
- > Working with ARM Templates, Part 2
- > Working with ARM Templates, Part 3
- > Working with ARM Templates, Part 4
- > Deploy a Linux VM using ARM Templates

#### Lesson 05 - Virtual Machines

> Encrypt a Virtual Machine

# Lesson 06 - Analyse Resource Utilization and Consumption

- > Configure Diagnostic Settings on Resources
- > Create Baseline for Resources
- > Create and Test Alerts
- > Create and Test Metrics
- > Create Action Groups
- Monitor and Manage Azure Costs
- View Alerts in Log Analytics

#### Lesson 07 - Create and Configure Storage Accounts

- > Create a Storage Account
- > Add Storage Account to a Virtual Network
- Manage Access Keys and Secure Access Signature (SAS)
- > Using Storage Explorer
- > Setting up Log Analytics for Storage
- > Configure Storage Redundancy

### Lesson 08 - Manage Virtual Networking

- > Overview of Virtual Networks
- Public and Private IP Addresses
- Routing Traffic on a Network

#### Lesson 09 - Connectivity Between Networks

- > Introduction to VNET Peering
- > Configuring VNET-to-VNET Communication

#### Lesson 10 - Manage Azure Active Directory

- > Azure Active Directory Basic versus Premium Tiers
- Create an Azure Active Directory Account (Azure AD)
- > Assign a Custom Domain to Azure AD
- > Upgrade Azure AD to Premium P2
- > Azure AD Identity Protection
- > Setting Up Self-Service Password Reset
- > Azure AD Conditional Access
- > Utilizing Access Reviews

#### Lesson 11 - Manage Hybrid Identities

> Azure AD Hybrid Identities

#### Lesson 12 - Migrate Servers to Azure

- > Setting Up Azure Site Recovery
- > Prepare ASR Source
- > Using VMWare P2V for Migration

#### Lesson 13 - Configure Serverless Computing

- > Overview of Serverless Computing
- Create an Azure Function App
- > Code an Azure Function
- > Create an Azure Logic App
- > More on Logic Apps
- > Create an Azure Event Grid
- Messaging with Service Bus

#### Lesson 14 - Implement Load Balancing

- Create a Load Balancer
- Understand Load Balancer Settings
- Front End IP Configuration
- Create an Application Gateway
- Configure the Application Gateway

## Lesson 15 - Implement Multi-Factor Authentication and Role Based Access Control

- > Turn on Azure AD Multi-Factor Authentication (MFA)
- > Enable Azure AD Conditional Access
- > Set up Fraud Alerts
- > MFA One-Time Bypass
- > Verifying Your Identity with MFA
- > Role-Based Access Control (RBAC)
- > Creating Custom RBAC Roles

#### Lesson 16 - Create Web Apps by Using PaaS

- Create App Services Web App
- > Deploy Web App
- Create an App Services Container App
- > Upload Web jobs as Background Jobs

# Lesson 17 - Design and develop apps that run-in containers

- > Create a Kubernetes Cluster (AKS)
- > Deploy a Kubernetes Cluster (AKS)
- Use the AKS Dashboard
- > Install Docker Toolbox on Local
- > Test the Container Using Docker Compose

#### Lesson 18 - Implement Secure Data Solutions

- > Introduction to Data Security
- > Data Storage Encryption
- > Azure Key Vault
- > Storing ARM Template Secrets
- > Storing Application Secrets
- > Storing Certificate Secrets

## Lesson 19 - Develop for Azure Storage - Cosmos DB

- Intro to Cosmos DB
- > Create a Cosmos DB Collection
- > Develop for Cosmos DB
- > Principle of Data Consistency

## Lesson 20 - Develop for Azure Storage - Relational DB

- > Intro to Relational Databases
- > Create a SOL Database
- > Concept of Geo-Replication
- > Using the SQL Database Firewall
- > SQL Server Management Studio
- > Inserting Data into SQL Database

#### Lesson 21 - Develop for the Cloud

- > Message Based Integration Architecture
- > Develop for Autoscaling
- > Thanks So Much!

### About US:

Green's Technologies is a pioneer in IT skills training, which concentrates majorly on the emerging technologies that are revolutionizing our world. Our hybrid learning approach enables learner to upgrade themselves which is backed by the industry's top most completion rates. Collaborating with professionals and organizations, we identify their customized needs and offer Result oriented solutions to assist them in achieving their professional goals.

## Tools/Services Covered:





