Microsoft Azure Certification Training Course (AZ 305)

https://www.edureka.co/microsoft-certified-azure-solution-architect-certification-training

About Edureka

Edureka is a leading e-learning platform providing live instructor-led interactive online training. We cater to professionals and students across the globe in categories like Big Data & Hadoop, Business Analytics, NoSQL Databases, Java & Mobile Technologies, System Engineering, Project Management and Programming. We have an easy and affordable learning solution that is accessible to millions of learners. With our students spread across countries like the US, India, UK, Canada, Singapore, Australia, Middle East, Brazil and many others, we have built a community of over 1 million learners across the globe.

About Course

This Microsoft Azure certification training will help you prepare for the Microsoft Azure Architect Technologies (AZ-305) exam and achieve Azure Solutions Architect certification. You will be able to design cloud architect solutions using these Microsoft services effectively. This Azure training Course will help you implement advanced networking configurations, plan authentication and security of the infrastructure, use PaaS solutions and various services to deploy end-to-end cloud solutions.

Microsoft Azure Course Curriculum

Introduction to Microsoft Azure Solution Architect Training and Its Services

Learning Objective: In this Microsoft best Azure training and certification module, you will learn about the Creation of a Free Tier Azure Account, accessing Azure Services through Azure Portal and Azure Storage Service. You will gain knowledge of ARM Templates and learn to use them for deploying Azure resources.Topics:

Below are the topics you will have in this Azure Cloud Certification module:

- Azure Subscriptions

- Azure Resources

- Azure Free Tier Account

- Azure Resource Manager

- Azure Resource Manager Template

- Azure Storage

- Types of Azure Storage

Hands-On:

- Create a free tier Azure account

- Create a web app service using Azure Portal

- Create and Deploy ARM templates

- Manage Azure Storage account using Storage Explorer

- Manage Azure Cost and Billing Service

Azure Virtual Machines and Networking

Learning Objective: In this Microsoft Azure online training module, you will learn to deploy and

manage Azure Virtual Machines. You will learn to create and deploy an Azure Storage account, Azure Blobs and Azure Managed Disks. You will learn about Azure Virtual Networks and all its related concepts like NIC, NSG, Subnets, and more.Topics:

Below are the topics you will have in this Azure Architect course module:

- Azure Resource Manager Virtual Machine
- Virtual Machines in ARM Template
- Overview of Azure Virtual Machine
- Azure Managed Disks
- Azure Blob Storage
- Networking in Azure
- Subnets, NIC, NSG, IP Addresses, DNS

Hands-On:

- Create Windows and LINUX Virtual Machines
- Create BLOB Storage using Azure Portal
- Create VM with Storage Account and Managed Disks
- Configure Azure Virtual Network

Azure VMSS and Availability Zones

Learning Objective: In this Microsoft Azure solution architecture certification module, you learn about Azure Availability Sets and its features. You will also learn about various Availability Zones and Virtual Machine Scale Sets, Azure Load Balancer and Azure Application Gateway.Topics:

Below are the topics you will have in this Azure Architect Training module:

- Resiliency
- Azure Availability Sets
- Azure Availability Zone

- Autoscaling

- Virtual Machine Scale Set

- Fault Domain

- Update Domain

- Load Balancer

- Application Gateway

- Azure Disk Encryption

Hands-On:

- Create a Virtual Machine Scale Set

- Configure VMSS and add custom usage alerts

- Configure VM for Redundancy

- Create Application Gateway

Azure App Services and Its Features

Learning Objective: This Azure Certification training module deals with the aspects such as Deploying and Managing Web Apps, App Service Security, and Azure App Service Plan. You will learn to create, deploy and configure Function App and Logic App.Topics:

Below are the topics you will have in this Microsoft Azure Certification module:

- Azure App Service Web Apps

- App Service Security

- Serverless Computing Concepts

- Function Apps

- Azure Event Grid

- Azure Service Bus

- Azure App Service Logic App

- Using Shell Commands to create Web App

- Background Tasks

- Swagger tool

Hands-On:

- Create an App Service Plan

- Create a Web App Instance

- Use shell commands to create an App Service Web App

- Create a Continuous WebJob

Azure Storage Solution and Design Patterns

Learning Objective: Our Azure certification courses module deals with the aspects such as Azure Architecture Center, Cloud design patterns, competing consumers pattern, Cache-aside pattern. You will learn about Azure Storage Service and Database features.Topics:

Below are the topics you will have in this Azure certification module:

- Azure Architecture Center

- Cloud design patterns

- Cache-aside pattern

- Sharding Pattern

- Azure SQL DB

- Azure Elastic Pool

- Azure Data Lakes

- Azure Data Factory

- Azure Cosmos DB

Hands-On:

- Create and Deploy Azure Data Lake

- Create and Deploy Azure Cosmos DB

Advanced Azure Hybrid Connectivity and Site Recovery

Learning Objective: This Azure Architect certification module deals with the Azure Hybrid Connectivity and its related concepts. You will also implement VNet Peering, P2S and S2S connectivity. You will also learn about VPN Gateway, ExpressRoute and BGP Protocol.Topics:

Below are the topics you will have in this Azure certification module:

- Hybrid Connectivity

- VNet S2S VPN

- VNet Peering

- Service Chaining

- Azure VPN Gateway

- Policy Based Gateway

- Route Based Gateway

- Swagger tool

- Gateway Connections

- Express Route

- VNet Routing

- User Defined Route

- Border Gateway Protocol

Hands-On:

- Create a Virtual Network Gateway

- Design User Defined Routes

- Migrate On-Premise Machines to Azure using Azure Site Recovery

Azure Kubernetes Service

Learning Objective: This Azure Architect certification module provides an in-depth knowledge of Azure Service Fabric as a distributed systems platform that makes it easy to package, deploy, and manage scalable and reliable microservices and containers. You will also explore Kubernetes Service (AKS) in Azure.Topics:

Below are the topics you will be having in this azure cloud architect course module:

- Application Environment Components

- Docker

- DockerFile

- Docker Image

- Azure Container Registry

- Azure Container Instance

- Orchestration

- Azure Kubernetes Service

- Diagnostics Logs

Hands-On:

- Create and Deploy Docker Image from DockerFile

- Deploy an Application in ACI

- Deploy an Application in AKS

Azure Messaging Service (Events, Hubs, Queue and Bus)

Learning Objective: In this Azure Solution Architecture certification module, you will learn to configure a message-based integration architecture, develop a methodology for Asynchronous Processing, and create apps for Autoscaling.Topics:

Below are the topics you will be having in this azure cloud architect course module:

- Azure Messaging Service

- Azure Service Bus

- Azure Events Hub

- Azure Events Grid

- Azure Notifications Hub

- Auto Scale Ruling in Azure

- Transient Fault Handling

Hands-On:

- Create a Service Bus Queue

- Deploy Service Bus Topics and Subscriptions

- Design and Implement Azure Service Bus

- Enable Auto Scale based on CPU Metrics Or Schedule

- Implement Multi-Factor Authentication (MFA)

Azure Active Directory and Role Based Access Control

Learning Objective: This Azure online training module deals with aspects such as Access Control and RBAC. You will learn about implementing authentication and authorization in applications. Also, you will learn to conceptualize the data security using End-to-end encryption, Azure confidential computing, Azure Key Vault, SSL and TLS communications.Topics:

Below are the topics you will have in this Azure Solutions Architect Training module:

- Access Control

- Role Based Access Control

- Authentication in applications (certificates, Azure AD, Azure AD Connect, token-based)

- Multi-Factor Authentication (MFA)

- Claims-based authorization

- Role-based access control (RBAC) authorization

- End-to-end encryption

- Azure confidential computing

- SSL and TLS communications

- Azure Key Vault

- Configure Fraud alerts

- Bypass option, trusted IPs

- Managed Service Identity

- Service Principal authentication

Hands-On:

- Implement authentication using certificates, Azure AD, Azure AD Connect, and tokens

- Implement Multi-Factor Authentication (MFA)

- Implement Claims-based authorization

- Implement RBAC authorization

- Implement secure data for end-to-end encryption

- Implement secure data for implementing SSL and TLS communications.

- Use Azure Key Vault to manage cryptographic keys

Azure Monitoring and Insights Service

Learning Objective: In this Microsoft Azure certification module you will learn about Monitoring Azure Services. You will learn about Azure alerts, metrics services. You will also get an overview on Azure Log analytics, App Insights service, Azure Activity Log and Azure Service Health.Topics:

Below are the topics you will have in this Azure course module:

- Azure Monitoring

- Azure Analytics

- Azure Alerts

- Azure Resource Metrics

- Azure Activity Log

- Service Health

- Azure Log Analytics

- Azure App Insights

Hands-On:

- Create and Deploy Alert Rules for Azure Resources

- Analyze the data in your metric database

- Create and Configure Azure Log Analytics

- Deploy Azure App Insights Service

Design Identity & Security & Design Storage

Learning Objective: In this Microsoft Azure certification module we will explore different security and storage design aspects like Authentication and Authorisation principles, lisencing, compliance, PIM, storage accounts, etcTopics:

Below are the topics you will be having in this azure cloud architect course module:

- Authorisation and Authentication

- Authorisation and Authentication Protocols

- Azure AD B2B B2C

- Security and Risk Management

- PIM

- Licensing & Compliance

- Understanding Azure Storage

- Setting Up Azure Storage

- Designing Storage Access

- Storage Security and Best Practices

Hands-On:

- OpenID & OAuth2

- Conditional Access

- Storage Account Creation and Shared Access Signatures

Design Azure Migration

Learning Objective: This Azure certification module will discuss and explain design strategies for Data Migration and Azure services for Migration

Topics:

- Design Migration & Integration Strategy

- Understand Data Protection at Different Stages

- Migration Fundamentals

- Azure Services for Migration

Hands-On:

- Migration and Access Using Azure Migrate

Design Monitoring (Self-Paced)

Learning Objective: In this Azure Solutions Architect training module, you learn and explore different design approaches to minimise costs for different resources like compute, storage, network etc

Topics:

- Introduction to Design for Cost Optimization

- Azure Cost Calculator and Azure Cost Management

- Minimize Compute Costs

- Minimize Network Costs

- Minimize Storage Costs

- What should be your Monitoring Strategy

- What is Compliance

- What should be the Compliance Strategy

- Understand the Azure Monitoring Service

- Azure Application Insights

- Azure Monitor - Use Cases

- Achieving Compliance with Azure Policy

- Azure Sentinel

Design Business Continuity (Self-Paced)

Learning Objective: In this Azure online training module we will explore Site recovery, replication, backup etc

Topics:

Below are the topics you will have in this Azure Solution Architect certification module:

- Best Ways to design:

- Site Recovery

- Replication

- Backup and Archival

- Usecase: Recommend a solution for site recovery

Microsoft Azure Solutions Architect Certification Project

What are the system requirements for Microsoft Azure Certification (AZ-305) ??

Following are the system requirements for Microsoft Azure Solution Architect Training:

Hardware Requirements:

- Memory – Minimum 4 GB RAM

- Processor – Intel Core i3 CPU @2.00 GHz or later

- Storage – 250 GB HDD/SDD or later

Software Requirements:

- Operating System – Windows 7 or later, Ubuntu 14 or later

- Visual Studio 2017 community edition (Include Azure packages)

- Windows PowerShell 4.0 or later (Install Azure Module)

- Microsoft Azure SDK for .NET v2.9 (prefer latest)

How will I execute practicals in this Microsoft Azure Training?

You have to create an Azure Free Tier account to execute all the practicals. The stepwise guide for creating a Free Tier account will be available in the LMS and Edureka's support team will assist you 24*7 in case you have any doubts.

Which project is part of this Azure Solutions Architect Training?

Streamatics is an organization involved in processing data and performing analytics. They perform Data Analysis on Petabytes of data. All this data is received from a world-wide network of sensors and other such devices. The flow of data from these devices fluctuates unpredictably frequently. Processing of huge amounts of data, with high accuracy and speed, takes a huge toll on Streamatic's on-premise servers. Streamatics has decided to migrate its entire data processing engine on Azure's

cloud for faster and easier data ingestion as well as analysis. The resources of the organization are securely accessed using the Windows Active Directory. Since the organization has started leveraging Azure SaaS service, the exchange server of the organization has been moved to Azure AD thus giving employees access to the SaaS services. The company currently has SCOM for managing the entire infrastructure.