

Microsoft Azure Certification Training

Overview of Cloud Computing and Microsoft Azure

Goal : Give a brief overview of Cloud and Azure essentials and provide an overview on Azure Platform.

Objectives : Upon completing this module, you should be able to: Summarize Cloud and its features, Relate different Cloud Models, Classify different Cloud Services, Categorize the Cloud vendors, Define Datacenter, List the Azure Services, Describe the different Portals used to handle the Service Instances.

Topics : Summarize Cloud and its features, Relate different Cloud Models, Classify different Cloud Services, Categorize the Cloud vendors, Overview on Regions and Datacenter, List the features of Azure, Azure Services, Azure Management Portals.

Hands on : Creating an Azure account, Creating a Website using Preview Portal.

Building Application Infrastructure in Azure using Virtual Machines

Goal : Demonstrate Virtual Machines service in Azure and deployment of workload to a Virtual Machine. Handle Virtual Hard disks and Virtual machine endpoints.

Objectives : At the end of this module, you should be able to: Setup a Virtual Machine in Azure, Create Windows and Linux VMs, Create a VM using Images, Scale ARM Virtual Machines.

Topics : Azure Virtual Machines setup, Creating Windows and Linux VM, Create VM using images, Scaling ARM Virtual Machines.

Hands on : Creating a Virtual Machine using the Azure Preview Portal, Creating a Virtual Machine ScaleSet

Hosting Web Applications on the Azure Platform

Goal : Demonstrate the creation and monitoring of Web App instance and publish ASP.NET web application to Web Apps.

Objectives : At the end of this module, you should be able to: Explain Azure App Services, Azure Web App Service, Create a Web App instance, Create an Edureka Web app, Publish a simple ASP.NET web to Web Apps, Monitor and manage the Edureka Web App.

Topics : Azure Web Apps, Hosting Web Applications in Azure, Configuring an Azure Web App, Publishing an Azure Web App, Monitor and Analyze Azure Web Site.

Hands on : Create Edureka Web app, Publishing Edureka Web app on Azure.

SQL Data Storage in Azure

Goals :Visualize Azure SQL Databases and learn to store and retrieve data on it.

Objectives :At the end of this module, you should be able to: Classify the different Azure SQL Database tiers, Create an Azure SQL Database, Configure and perform Point-in-Time Recovery, Enable Geo-Replication, Import and export data and schema, Scale Azure SQL databases.

Topics : Azure SQL Database overview, Different SQL Database tiers in Azure, Azure SQL Database Tools, Securing and Recovering an Azure SQL Database Instance, Migrating data to Azure SQL Database, Scale Azure SQL databases.

Hands on : Creating an Azure SQL Server and Database, Connecting the Edureka Web app with the Azure SQL.

Designing Resilient Cloud Applications

Goal : Interpret the common practices and patterns for building resilient and scalable web applications that will be hosted in Azure.

Objectives : At the end of this module, you should be able to: Define Resiliency requirements, Design for Resiliency, Design strategies for Scaling with Cloud Applications, Test for Resiliency.

Topics : Resiliency and its aspects, Process to achieve Resiliency, Defining Resiliency requirements, Approaches to think about Resiliency, Design for Resiliency, Resiliency Strategies, Testing for Resiliency, High Availability for Azure Applications.

Hands on :Build High Performance ASP.NET Web Application.

Cloud Services Management in Azure

Goal : Illustrate the Cloud Services and the use of Worker, Web and Cache roles.

Objectives : At the end of this module, you should be able to: Use Cloud Service Worker Roles and Web Sites Web Jobs to process data in the background, Use Cloud Service Cache Roles to store data in the cache.

Topics : Overview of Azure Cloud Services, Cloud Service Web Roles, Customizing Cloud Service Configurations, Updating and Managing Cloud Service Deployments, Cloud Service Worker Role, Cloud Service Worker Role Processing, Analyzing Application Cloud Service Role Instances.

Hands on :**Creating Azure Web Roles using Visual Studio 2017, Creating a Background Process using a Azure Worker Role.**

Tabular Data Storage in Azure

Goal : Illustrate data storage in Azure Table Storage.

Objectives : At the end of this module, you should be able to: Store data in Azure Table Storage.

Topics : Azure Storage Overview, Azure Storage Tables Overview, Table Entity Transactions, Azure DocumentsDB.

Hands on :Creating an Azure Table Storage table, Managing the Table data using the .NET API for Azure Storage.

Storing and Consuming Files from Azure Storage

Goal : Illustrate the storage and access of multimedia files in Azure using Blob Storage.

Objectives : At the end of this module, you should be able to: Master the Blobs storage in Microsoft Azure Storage, Identify the software development kit (SDK) libraries, namespaces, and classes that are available for blobs.

Topics : Azure Storage Blobs, Controlling Access to Storage Blobs and Containers, Monitoring Storage Blobs, Configuring Azure Storage Accounts, Azure Files, Uploading and Migrating Storage data.

Hands on : Storing Generated Documents in Azure Blob Storage, Storing Documents related to the Edureka Web App in the Azure Blob Storage using SMB File Share service.

Designing a Communication Strategy by Using Queues and Service Bus

Goal : Implement the Storage Queues service, Service Bus Queues service and Notification Hubs service and Illustrate the Service Bus and Service Bus Relay.

Objectives : At the end of this module, you should be able to: Use Azure Queue Storage to queue data for Asynchronous processing, Identify the Service Bus offerings and which ones to use in appropriate scenarios, Use the Azure Service Bus Relay to connect on-premise services with Client applications.

Topics : Queue mechanisms in Azure, Azure Storage Queues, Handling Storage Queues Messages, Azure Service Bus, Azure Service Bus Queues, Azure Service Bus Relay, Azure Service Bus Notifications Hubs.

Hands on : Using Storage Queues to Manage Requests between Web Applications in Azure, Creating an Azure Storage Queue Instance to store Requests, Creating an Azure Service Bus Queue Instance to store Requests, Creating an Azure Service Bus namespace, Using the namespace to connect a Cloud Web Application to the local WCF Service.

Automating Integration with Azure Resources

Goal :Handle Azure Resources using PowerShell, Client Libraries or the REST API and learn to about PowerShell Automation.

Objectives : At the end of this module, you should be able to: Describe the Azure Software Development Kits (SDKs) and Client Libraries, Use Windows PowerShell, Client Libraries or REST API to Automate Azure Service Management, Explore two sets of Modules available for PowerShell Automation, Describe

the Service Management API and compare with Resource Manager, Use the Resource Manager to create Resource Groups and Templates.

Topics : Azure SDK Client Libraries, Virtual Machine Configuration Management, Scripting Azure Service Management by Using Windows PowerShell, Azure REST Interface, Azure Resource Manager.

Hands on : Creating a test environment using PowerShell.

Azure Web Applications Security

Goal : Illustrate the AD service and Security Implementation in a Cloud Web Application.

Objectives : At the end of this module, you should be able to: Describe the Azure AD service, Understand the features that are available for the directories in Azure AD, Use Azure Active Directory to implement Security in a Cloud Web Application, Use Microsoft Azure Multi-Factor Authentication service efficiently.

Topics : Azure Active Directory, Introduction to Identity Providers, Azure AD Directories, Azure AD Multi-Factor Authentication, Azure Role-Based Access Control.

Hands on : Integrating ASP.NET Identity for the Administration Portal with Azure Active Directory.

Maintaining and Monitoring Web Solutions in Azure

Goal : Master the Deployment of Web Applications to Azure.

Objectives : At the end of this module, you should be able to: Use Web Deploy and Service Packages to Efficiently Deploy Web Applications to Azure.

Topics : Deployment Strategies for Web Applications, Deploying Azure Services, Continuous Integration, Monitoring Cloud Applications.

Hands on : Deploying the Web Application Projects to Azure.