



CLOUD ENGINEERING AZURE+DevOps

**COURSE
CONTENT**



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ABOUT US

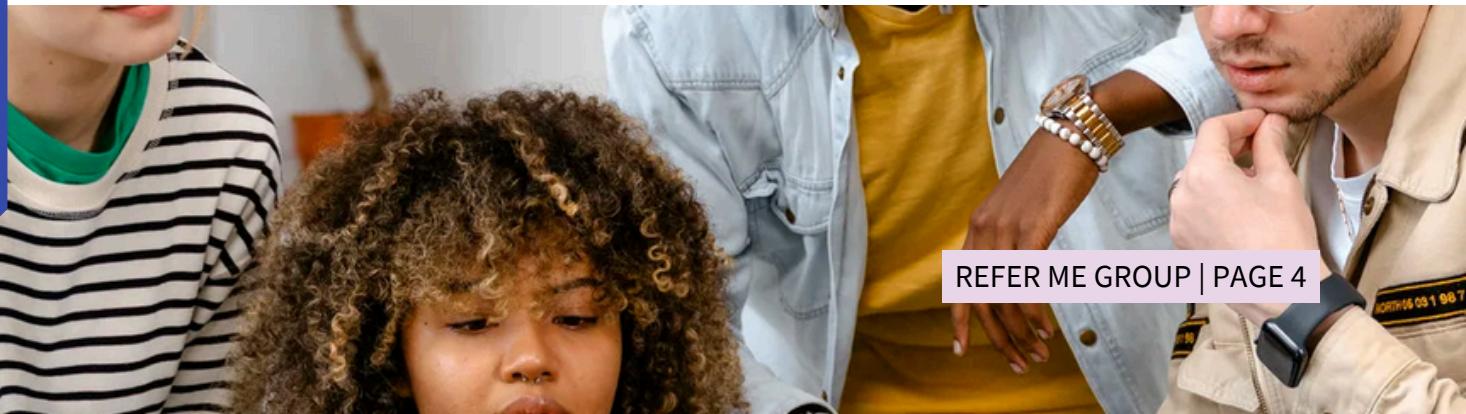
For over 10 years, we've been growing from scratch and today we are on a mission to help the community with our dedication and honesty. Our mission is to provide best knowledge at affordable fee with great quality.

We believe that everyone deserves best and money should not be barrier in learning.

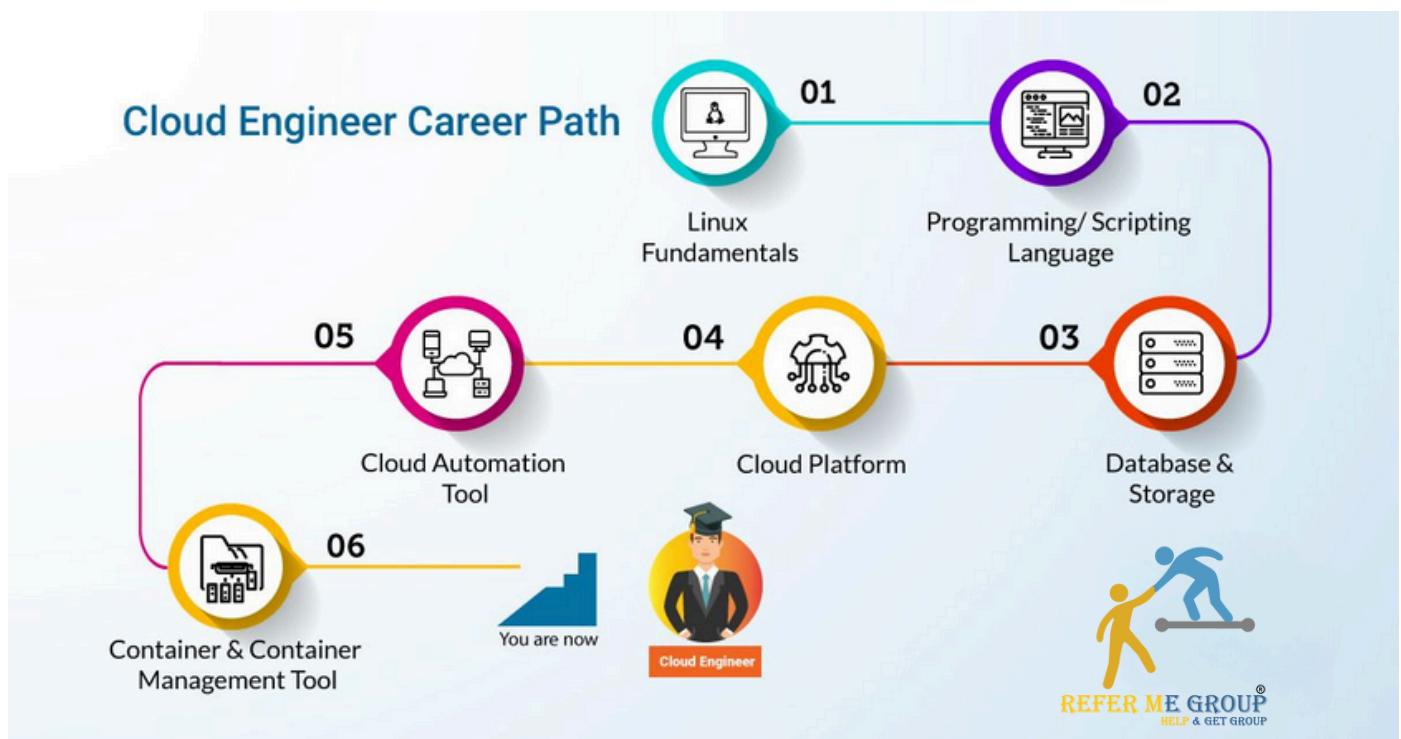


- Ø Affiliation with multiple Certification Board**
- Ø Registered (see Logo)**
- Ø 10+ Years old Edu-Tech Institution**
- Ø Served/Serving 10+ Corporates**
- Ø Trained Professionals from 20+ Countries**
- Ø 510+ Professionals Trained as Business Analysts**
- Ø 350+ Professionals Trained in AWS + DevOps**
- Ø 400+ Agile Certified Professionals**
- Ø 4.8 Rating by 740+ Professionals on Google**
- Ø 2500+ Professionals Trained in Automation**
- Ø 2,800+ (99.8%) Passed ISTQB Professionals**
- Ø 5,800+ Professionals Trained**
- Ø 11,000+ Hours of Training**
- Ø 1,80,000+ Professionals Network**

PROGRAM EXECUTION



CAREER PATH



AZURE COURSE CONTENT

Session 1 Introduction to Cloud

- What is Cloud Computing
- Why we need Cloud Computing
- How Cloud Computing works
- Cloud Computing Services
- Methods of Cloud Deployment
- Advantages of Migration to Cloud

Session 2 Introduction to Azure

- What is Microsoft Azure
- Why we can go for Microsoft Azure
- How Microsoft Azure got developed
- Microsoft Azure Services Overview
- Types of Microsoft Azure Account
- Azure Account Subscription Creation
- About Azure Infrastructure
- Real-Time Projects Overview

Session 3 Azure Identity Access Management

- Creation of user accounts
- Setting up IAM Hierarchy
- Roles in IAM
- Groups in IAM
- Assigning permissions for users
- Creation of custom policies for delegation
- Setting up Subscription for Azure Account
- Enabling Identities, Permission for the Subscription



AZURE COURSE CONTENT

Session 4 Azure Virtual Machines

- Introduction to Virtualization
- Azure Availability Sets
- Azure VM types & Sizes
- Creation of Virtual Machines
- Azure VM Disks
- Disks Snapshots
- VM Images & Templates
- Managing VM network settings
- Configuring Windows/Linux services on Azure VMs

Session 5 Azure Virtual Networking

- Introduction to Networking
- Azure VNet Concepts
- Azure VNet Implementation
- Subnets & Network Security Groups
- Azure VNet Peering connections
- Azure VNet NAT functions
- Hub & Spoke VNet Architectures
- Configuring Network Security Groups

Session 6 Azure Storage Accounts

- Types of General Storages
- Azure Storage Concepts
- Storage Account Creations
- About Azure Storage Classes
- Blob, File, Table, Queue Storages
- Azure File Share Connection
- Azure Static Website Hosting
- Object Versioning



AZURE COURSE CONTENT

- Session 7 Azure Load Balancers
- Types to Load Balancers
- Azure Load Balancer Real-Time use cases
- Load balancer Implementation
- Public Load Balancer Setup
- Private Load Balancer Setup
- Website Hosting with Load Balancer
- Health Check creations to balance the load

Session 8 Azure VM Scales Set

- Types of Auto Scaling
- Azure Auto Scaling
- AvailabilitySet vs VMScaleSet
- VMScaleSet with Load Balancer
- VMScaleSet creations for Automatic Scaling

Session 9 Azure Monitoring

- Setting up Metrics
- Generating Alerts
- Collecting Activity logs

Session 10 Azure DNS

- Types of Zones & Records
- Azure DNS hosted Zones
- Public DNS Setup
- Private DNS Setup
- Associating DNS Hosted Zone with VNets
- Record creations into the Hosted Zones
-



AZURE COURSE CONTENT

Session 11 Azure Databases

- SQL Types
- Available SQL Engines in Azure
- Configuring Azure SQL server
- Connecting with Azure SQL
- No SQL table creations in Cosmos DB

Session 12 Azure App Services

- About PaaS and App Services
- Requirements of App Services
- Working with App Service Plans
- Hosting website with the App Services

Session 13 Azure Active Directory

- About Identity as a Service
- Pre-requisites for Azure AD connection
- Working with Azure AD Connect tool
- Synchronizing On-Prem AD with Azure AD



AZURE COURSE CONTENT

Session 14 Azure Backup & Recovery

- About Disaster Recovery
- RTO vs RPO
- Backing-up methods in Azure
- Azure Site Recovery Options
- Restoring VMs by RPO

Session 15 Azure DevOps Introduction

- What is DevOps
- Why we need DevOps
- Available Automation in Azure
- Azure Infrastructure Automations
- Essential DevOps tools overview

Session 16 Special Real-Time Use Cases

- Designing a CI/CD pipeline using Azure DevOps
- Container CI/CD using Jenkins and Kubernetes on Azure Kubernetes Service Cluster
- Immutable Infrastructure CI/CD using Jenkins and Terraform on Azure Infrastructure Architecture
- Java/Python CI/CD using Jenkins and Azure Web Apps



DEVOPS COURSE CONTENT

Session 1 Azure DevOps Introduction

- What is DevOps
- Why we need DevOps
- Available Automation in Azure
- Azure Infrastructure Automation
- Essential DevOps tools overview

Session 2 Python Basics

- Introduction to Python
- Installation of Python
- Python Input and Output statements
- Python Data Types
- List, Set, Tuple, Dictionary
- Looping and Conditional statements in python
- Functions in Python

Session 3 Linux Basics

- Linux basic Commands
- Linux basic Administration
- Linux Root & Sudo users
- Linux File System Hierarchy
- YUM package management
- Linux Services Management

Session 4 Azure Powershell

- PowerShell scripting Basics
- Azure PowerShell Versions
- Understanding PowerShell cmdlets
- Building-up infra by using Azure PowerShell



DEVOPS COURSE CONTENT

Session 5 Azure ARM Templates

- What are Templates?
- Creating JSON Templates
- Using Functions
- Defining Parameters
- Defining Variables
- Defining Resources
- Defining Outputs
- Template File Syntax
- Template Specs
- Deploy with ARM Templates
- Deployment Modes
- Linked templates

Session 6 Azure Terraform

- About Terraform on Azure
- Installation and configuration Terraform
- Testing Terraform projects
- Managing infrastructure with Terraform codes
- Managing networks with Terraform codes
- Managing databases with Terraform codes
- Managing AKS with Terraform codes



DEVOPS COURSE CONTENT

Session 7 Azure Kubernetes

- Introduction to Azure Kubernetes Service
- Introduction to Containers on Azure
- Building and storing container images with Azure
- Preparing a web application for AKS
- Deploying and using Azure Container Registry
- Deploying an AKS cluster
- Running your application in AKS
- Scaling applications in AKS
- Updating an application in AKS
- Upgrading Kubernetes in AKS

Session 8 Azure Jenkins

- About Jenkins on Azure
- Install and configure Jenkins
- Scale using Jenkins and Azure
- CI/CD to Azure Functions
- CI/CD to Azure Storage
- CI/CD to Azure DevOps
- CI/CD to App Service
- CI/CD to Linux VMs
- CI/CD to AKS



DEVOPS COURSE CONTENT

Session 9 Azure Functions

- What are Azure Functions?
- Hosting options
- Compare serverless options
- Durable Functions
- Supported languages
- Connect to services
- Local development
- Scripting with Azure Functions

Session 10 Azure Ansible

- About Ansible on Azure
- Installation and Configuration of Ansible
- Managing Virtual Machines with Playbooks
- Managing Virtual Machine Scale Sets with Playbooks
- Managing Virtual Networks with Playbooks
- Managing AKS clusters with Playbooks

Session 11 Azure CLI

- Azure CLI Installation
- Create Azure resources with Azure CLI
- Control Azure services with Azure CLI
- Manage virtual machines with Azure CLI
- Run parallel tasks in Azure Batch with Azure CLI
- Create a storage account using the Azure CLI
- Transfer objects to/from Azure Blob storage using the CLI
- Create a single Azure SQL database using the Azure CLI
- Create an Azure Database for MySQL server using the Azure CLI
- Create an Azure Database for PostgreSQL using the Azure CLI



DEVOPS COURSE CONTENT

Session 12 Azure Docker

- Docker Introduction
- Docker Architecture
- Docker Registries
- Docker Installation
- Import, Lock and Delete images
- Push and pull images with Docker
- Deploy container instance by Docker CLI
- Run Docker containers with Azure Container Instances
- Stop and start containers
- Update running containers
- Share data between containers

Session 13 Special Real-Time Use Cases

- Designing a CI/CD pipeline using Azure DevOps
- Container CI/CD using Jenkins and Kubernetes on Azure Kubernetes Service Cluster
- Immutable Infrastructure CI/CD using Jenkins and Terraform on Azure Infrastructure Architecture
- Java/Python CI/CD using Jenkins and Azure Web Apps



RISE TO ROAR

150+ SM/PM TRANSFORMATION

200+ OTHER TOOLS/TECHNOLOGIES

350+ PROFESSIONALS TRAINED IN AWS + DEVOPS

400+ AGILE CERTIFIED PROFESSIONALS

510+ BUSINESS ANALYST TRANSFORMATION SUCCESS STORIES

2500+ AUTOMATION TRANSFORMATION SUCCESS STORIES

2800+ (99.8%) PASSED ISTQB PROFESSIONALS

You can also roar



ADD-ON BENEFITS

TRAINING WHATSAPP GROUP

PERSONAL MENTORSHIP

SUPPORT AFTER TRAINING COMPLETION

DEDICATED STAFF DURING TRAINING PROGRAM

LIFE TIME CLASSROOM RECORDED SESSIONS

RESUME PREPARATION

LINKEDIN PROFILE UPDATE

PREMIUM JOB GROUP

Add-On Benefits

OUR NETWORK

10 MILLION+ IMPRESSION ON LINKEDIN

1,20,00+ LINKEDIN CONNECTIONS

12000+ FOLLOWERS ON FACEBOOK PAGE

11000+ PROFESSIONALS ON TELEGRAM JOB GROUPS

15000+ PROFESSIONALS ON WHATSAPP JOB GROUPS

10000+ PROFESSIONALS ON LINKEDIN JOB GROUPS

3500+ FOLLOWERS ON LINKEDIN PAGE





**CONTACT US
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