**Course Name: Azure DevOps Solutions**

Exam Code: AZ-400

Certification: Microsoft Certified: Azure DevOps Engineer Expert

**Pre-requisites for participants:**

Should have experience on development Dot Net, GIT, Code Deployment etc.

Should be aware about Azure basics

Should have 6+ years of IT exp

Should be aware of working on Linux console and/or powershell

**Total training duration: 40 Hours**

**------------------------------Start of Main Content ----------------------------------**

**Module 3: Deploy and Configure Standardized Environments**

**Lessons:**

* Overview
* Environments in IaaS/PaaS and with Containers
* Introduction to ARM Templates
* Implementing ARM Templates
* Logging, Troubleshooting and Diagnostics
* Provisioning and Configuring Environments with Azure DevTest Labs
* Introduction to Desired State Configuration
* DSC in DevOps
* Implementing Automation DSC

**Module 4: Azure Automation**

**Lessons:**

* Overview of Azure Automation
* Infrastructure as Code and Automation
* Automation Accounts & Security
* Runbook Assets
* Runbook Basics

**Module 5: Build and Deploy Automatically to Production**

**Lessons:**

* Overview of Build and Deploy
* Automated Builds
* Automated Deployments
* Package Management and Containers
* Overview of Continuous Integration
* Continuous Integration
* Pipelines and Agents
* Continuous Delivery
* Release Pipelines
* Environments and Tasks
* Advanced Delivery
* Overview of Continuous Deployment
* Continuous Deployment
* Advanced Continuous Deployment

**Module 6: Containerization**

**Lessons:**

* What is Containerization
* Containers and Docker
* Linux and Windows Containers
* Where can you host containers?
* DevOps and Containers

**Module 7: Azure Container Services**

**Lessons:**

* Introduction to Azure Container Services (ACS/AKS)
* Creating and configuring ACS clusters
* Running Multiple Containers
* Configuring monitoring and logging
* Scaling & Deployment

**Module 8: Application Monitoring**

**Lessons:**

* Overview of Application Monitoring
* Application Performance Monitoring
* Application Insights
* Search and Analysis

**Module 9: Networking concepts (Mostly conceptual – 4 Hours)**

**Lessons:**

* How to create Virtual Networks?
* How to enable VPN peering?
* What is VPN and how it works?
* How to deploy a web app on Virtual Machine and enable public IP address on it
* How to deploy azure web app and enable custom DNS?

**Module 10: CI/CD For Azure Data Factory (4 Hours)**

**Lessons:**

* ADF Modes
* Development flow for ADF
* Creating the Azure YAML Pipeline
* CI Process (Build Stage)
* CD Process (Deployment Stage)