

Azure DevOps - Course Content

Introduction to Azure

- Creating Account
- Explore Azure Portal
- Azure Compute
- Azure Networking
- Azure Active Directory
- Azure App services
- Azure Key-Vault
- Azure Storage services

Introduction to DevOps

- What is DevOps
- Overview of various DevOps Methodologies
- Difference between Waterfall Model vs Agile vs Scrum
- Monolithic vs Microservices architecture

Version control Tool

- GIT HUB
- Introduction to Azure Repo
- Introduction to Git
- Git Lifecycle
- Git Workflow
- Merging Branches
- Working with Branches in Git

Build Tool

- Why Build tools
- What is MAVEN
- Maven Repositories
- Types of Build Tools
- Introduction to framework

Docker

- Docker Architecture
- Container Lifecycle
- Port Binding
- Detached and Foreground Mode
- Docker file
- Docker file Instructions
- Docker Image
- Docker Registry
- Volumes
- Docker Compose

Azure DevOps

- Azure Boards
- Integration of azure boards to pipeline
- Azure Repos
- Azure Pipelines (Build and Release)
- Building Using Classic pipeline
- YAML File Introduction
- Agent Pool
- Azure Artifacts
- Azure Deployment groups

- Azure Environments
- Service Connections

Kubernetes

- Kubernetes - Container Orchestration Tool (Pre-requisite)
- What is Kubernetes (“k8s” or “kube”)
- Kubernetes Architecture
- Core Concepts of Kubernetes
- Kubernetes resources
- Load Balancer & Service Introduction
- Deployment and release strategy with Kubernetes
- Kubernetes Networking – Ingress, Egress, Kubeproxy
- Kubernetes YAML Files
- Kubernetes Commands
- Kubernetes namespaces