

# 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