

GitOps Fundamentals

Duration: 2 Days

Hands-On Format: This hands-on class is approximately 60/40 lab to lecture ratio, combining engaging lecture, demos, group activities and discussions with comprehensive machine-based practical programming labs and project work.

Prerequisites: Kubernetes Knowledge is Required

Module 1 – About GitOps

What is GitOps
GitOps Use Cases
GitOps Pros and Cons

Module 2 – Argo CD Basics

Introduction to Argo CD
Argo CD Installation
Creating an Application
Syncing an Application

Module 3 – Using ArgoCD

The Reconciliation Loop
Application Health
Sync Strategies
Secret Management
Declarative Setup
Deploying with Helm
Deploying with Kustomize

Module 4 – Progressive Delivery

What is Progressive Delivery
Introduction to Argo Rollouts
Blue/Green with Argo Rollouts
Canaries with Argo Rollouts
Automated Rollbacks with Metrics
Using Argo Rollouts with Argo CD