

# Oracle Cloud Infrastructure DevOps Professional: Hands-on Workshop

**Course Duration: 24 Hours**

**Course Code: OCI-DEVOPS -WKSP**

## 1. Course Overview

The *Oracle Cloud Infrastructure (OCI) DevOps Professional: Hands-on Workshop* is designed to provide IT professionals and developers with practical, real-world knowledge of implementing DevOps practices using OCI services. This workshop offers a blend of conceptual learning and hands-on exercises to ensure participants gain the ability to automate software delivery, streamline CI/CD pipelines, and deploy applications securely in Oracle Cloud.

## 2. What You'll Learn?

By the end of this workshop, participants will be able to:

- Understand the fundamentals of DevOps within the Oracle Cloud Infrastructure environment.
- Design and implement Continuous Integration and Continuous Deployment (CI/CD) pipelines.
- Use OCI DevOps services for automated builds, testing, and deployments.
- Manage and monitor deployments with scalability and security in mind.
- Integrate OCI DevOps with other developer tools and services.
- Apply best practices for modern cloud-native application development and delivery.

### 3. Target Audience

This workshop is ideal for:

- Cloud Engineers and Architects
- DevOps Engineers
- Software Developers and Testers
- IT Professionals aiming to upskill in OCI DevOps
- Anyone preparing for the Oracle Cloud DevOps Professional certification

### 4. Pre-Requisites

Participants are expected to have:

- Basic knowledge of cloud computing concepts
- Familiarity with Oracle Cloud Infrastructure fundamentals (networking, compute, and storage)
- Some experience with software development lifecycle (SDLC) and DevOps practices
- Prior hands-on exposure to OCI services is helpful but not mandatory

### 5. Course Content

#### **Module 1: Introduction to OCI DevOps**

- Overview of DevOps culture and practices
- Introduction to OCI DevOps services
- Workshop environment setup

#### **Module 2: Source Code Management & Build Pipelines**

- Setting up OCI Code Repositories
- Automating builds with Build Pipelines
- Integrating with external repositories (GitHub, GitLab, etc.)

### **Module 3: Continuous Deployment Pipelines**

- Designing deployment pipelines in OCI
- Managing deployment environments
- Rollback and canary deployment strategies

### **Module 4: Infrastructure as Code & Automation**

- Using Terraform with OCI
- Infrastructure automation and configuration management
- Hands-on: Deploying infrastructure using code

### **Module 5: Security & Monitoring in DevOps**

- Implementing security in DevOps workflows
- Monitoring pipelines and application performance
- Logging and troubleshooting deployments

### **Module 6: Advanced Integrations & Best Practices**

- Integrating OCI DevOps with other developer tools
- Best practices for CI/CD in OCI
- Capstone Hands-on Project