



Information Technology

Introduction to Kubernetes using Docker

Course Introduction

Enrol for the 5-day Introduction to Docker Kubernetes and OKD training course and change the way you build, ship, and manage your applications!

Through a blend of hands-on labs and interactive lectures, you will be able to learn the fundamentals of Docker Kubernetes and OKD. First, you will learn the basics of what a container is and how it enables cloud-native application designs. Next, you will explore the roles of Docker and Kubernetes, as well as the basics of how they work. Finally, you will discover how to prepare yourself and your organization to thrive in a container world. OKD provides a complete open source container application platform.

Target Audience

- Software Professionals
- Testing Professionals
- Software Architects and Designers
- Open source contributors and enthusiasts
- Developers who want to accelerate their careers as professionals using Dockers and Kubernetes
- Managers who are technical subject matter experts, leading software development projects

Learning Objectives

- Docker administration
- Core Concepts of Kubernetes
- Navigating Kubernetes Architecture
- The OKD Container Platform.
- Core Concepts of OKD
- Managing OKD

Course Outline

• 01 Day One

Module 1: Docker administration

- Introduction to Containers
- Introduction to Docker
- Downloading and Installing Docker
- Docker Essential Commands
- Docker Engine
- Understanding Docker Images
- Building Docker Images
- Storing and Retrieving Docker Images from Docker Hub
- Private Registry
- Managing Cgroups
- Building Containers from Images
- Understand Storage Plugins
- Networking Docker Containers
- Data Persistence with Volumes
- Linux Capabilities
- Creating and Managing Certificates

• 02 Day Two

Module 2: Core Concepts of Kubernetes

- Cluster Orchestration
- Looking at K8S Origination at Google
- Open Source
- Benefits
- Design Principles

Module 3: Navigating Kubernetes Architecture

- Master/Node
- Kubectl
- Replication Controller
- Kubelet
- Kube-Proxy

- Persistent Volumes
- Etcd
- High Availability

• 03 Day Three

Module 4: Using Kubernetes Features

- Pods
- Labels
- Services
- Namespaces
- Resource Quota

Module 5: The OKD Container Platform

- The Role of Containers & Container Orchestration
- Introduction to OKD
- Kubernetes and OKD Architecture
- Installation of OKD

• 04 Day Four

Module 6: Introduction To Docker

- Installation of Docker
- Docker Essential Commands
- Creating Containers
- Managing Data in Docker
- Docker Networking
- Docker Repositories
- Build Images
- Docker File

Module 7: Core Concepts of OKD

- Pods
- Services
- Replication Controllers
- Persistent Volume(PV)
- Persistent Volume Claim(PVC)
- Deployment Config

- Build Config
- **05 Day Five**

Module 8: Managing OKD

- Introduction to YAML
- Creating and Managing Pods
- Init Containers
- Labels & Selector
- Managing Replication Controllers

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 7, 2025	April 11, 2025	5 days	4250.00 \$	UAE - Dubai
April 21, 2025	April 25, 2025	5 days	4250.00 \$	UAE - Dubai
July 7, 2025	July 11, 2025	5 days	4950.00 \$	Netherlands - Amsterdam
Oct. 13, 2025	Oct. 17, 2025	5 days	4250.00 \$	UAE - Dubai