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**Learning Style: On Demand**

**Technology:**

**Difficulty: Beginner**

**Course Duration:**

## Kubernetes for Developers (LFD259)



### About this Course:

Kubernetes is a high-velocity open source orchestration tool to deploy, scale, and update containerized applications. Kubernetes for Developers (LFD259) will teach you how to containerize, host, deploy, and configure an application in a multi-node cluster.

## Course Objectives:

This course will teach students how to containerize, host, deploy, and configure an application in a multi-node cluster. Starting with a simple Python script, students will define application resources and use core primitives to build, monitor and troubleshoot scalable applications in Kubernetes. Working with network plugins, security and cloud storage, students will be exposed to many of the features needed to deploy an application in a production environment. The Certified K8 Application Developer can design build, configure and expose cloud native applications for Kubernetes. A CKAD can define application resources and use core primitives to build, monitor, and troubleshoot scalable applications & tools in Kubernetes. The exam assumes knowledge of, but does not test for, container runtimes and microservice architecture. The successful candidate will be comfortable using:

- An OCI-Compliant Container Runtime, such as Docker or rkt.
- Cloud Native application concepts and architectures.
- A Programming language, such as Python, Node.js, Go, or Java.

## Audience:

This certification is for Kubernetes engineers, cloud engineers and other IT professionals responsible for building, deploying, and configuring cloud native applications with Kubernetes.

## Prerequisites:

- Linux concepts and command line – We recommend Introduction to Linux, a free edX course
- Package managers
- Git and GitHub

## Course Outline:

Chapter 1. Course Introduction

Chapter 2. Kubernetes Architecture

Chapter 3. Build

Chapter 4. Design

Chapter 5. Deployment Configuration

Chapter 6. Understanding Security

Chapter 7. Exposing Applications

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