

# **LFS258 - Kubernetes Fundamentals**

**Modality: On Demand**

**Duration: 10 Hours**

## **About the course:**

DevOps University's Kubernetes Fundamentals course is curated to work with a vast range of Linux technologies. By taking this course you will be equipped with the ability to tackle core Kubernetes related problems with great ease.

Kubernetes is rapidly becoming the industry standard for operating on containerized programs and data driven applications. Our course covers the basics required to understand Kubernetes Fundamentals and pick up the pace towards developing scale-able, large and fault tolerant applications that are easy to control. From basics to high level design this course will take you from beginner to be able to build complex applications.

Building on 15 years of experience on managing Google containerized applications Kubernetes is an increasing open source community that has revolutionized the way we develop and manage software and applications and has also changed the role of system administrators around the globe across leading organizations. This online self-paced training will equip you with key principals e.g. deployments, pods and replica sets and will give you the necessary information and will help to start using Kubernetes by yourself! DevOps University's Kubernetes Fundamentals training will instruct you about using container management platform that are used by leading tech giants such as Google.

The average salary for Kubernetes Engineer is **\$122,444** per year.

## **Objectives:**

### **You will learn the following:**

- Kubernetes architecture
- Deployment and getting into the cluster
- Secrets and Config Maps
- Much more

## **Audience:**

- Programmers and system administrators who want to get started with Kubernetes.

## **Prerequisites:**

- For maximum efficiency of learning this program, you should have fundamental Linux command line skills and some understanding of Linux containers (e.g. Docker).

## **Our Program is:**

- 100% online self-paced training
- Filled with labs (and alternatives) made by our technical specialists
- Curated to help you begin with the design/architecture of complex applications and understand how they are going to work with Docker images

## **Course Outline:**

- **Chapter 1. Course Introduction**
- **Chapter 2. Basics of Kubernetes**
- **Chapter 3. Installation and Configuration**
- **Chapter 4. Kubernetes Architecture**
- **Chapter 5. APIs and Access**
- **Chapter 6. OPI Objects**
- **Chapter 7. Managing State with Deployments**
- **Chapter 8. Services**
- **Chapter 9. Volumes and Data**
- **Chapter 10. Ingress**
- **Chapter 11. Scheduling**
- **Chapter 12. Logging and Troubleshooting**
- **Chapter 13. Custom Resource Definitions**
- **Chapter 14. Kubernetes Federations**
- **Chapter 15. Helm**
- **Chapter 16. Security**