

KubeAcademy Transcript

- **Course:** Building Applications for Kubernetes
- **Lesson:** Introduction to the Course
- **Instructor:** Rich Lander
- **URL:** <https://kube.academy/courses/building-applications-for-kubernetes/lessons/introduction-to-the-course>

Hi, everyone. Welcome to the Kube Academy course, building apps for Kubernetes. My name is Rich Lander. I'm a senior Kubernetes architect at VMware. So, the team I work on is known as VMware Pivotal Labs and the field engineers on this team have a wealth of experience helping organizations adopt Kubernetes and cloud native. We have a program called cloud native readiness that we use to help our customers be ridiculously successful in this endeavor.

One part of the CNR program concerns itself with applications and helping teams achieve their application goals. And what you see here roughly represents the journey we often see that starts there on the left with the availability of a Kubernetes based platform. And these are the primary concerns we generally find ourselves addressing along that journey. This course covers an introduction to that first concern you see here, develop a workflow. So if you're a software developer who's new to Kubernetes, you're in the right place.

In this course we'll help you cover various topics, including how to set up your workstation to develop containerized apps. There are a few essential tools you'll need when working with containers in Kubernetes, so we'll walk you through how to get those installed. Next in lesson two, we'll cover how to build container images for the applications you've developed.

In order to run your application and container, you first have to build a container image with Docker. We'll show you the steps involved. Then lesson three covers how to run a Kubernetes cluster on your workstation and run your app on that cluster. You may be surprised to learn that running a local Kubernetes cluster is quite easy once you know how. We have a lesson on how to do just that so you can verify how your app will behave when it's deployed to Kubernetes.

Next, we'll look at how to write the essential Kubernetes manifests that will be needed to deploy your app into production. There are a few Kubernetes resources that are commonly used to deploy applications and you'll learn what they are and when to use them.

Lesson five covers how to template those manifests and package your application for deployment. It is common to use Helm for this purpose, so we'll cover how to use it to generate manifests for different deployment environments. Lastly, in lesson six, we'll look at how to set up a development workflow in a way that will allow you to be productive. This lesson looks at how to optimize the feedback loop when making and testing changes to your application locally so that you can stay productive.

By the end of this course, you'll be familiar with the basic tools you'll need to use and be on the road to deploying your cloud native applications to Kubernetes. So with that said, we hope you enjoy this course and we'll see you in lesson one.