

Kubernetes Tutorial

This intermediate Kubernetes training teaches how to integrate Kubernetes into your infrastructure for managing both VMs and containers. Learn service discovery, load balancing, storage orchestration, and automation of rollouts, rollbacks, and bin packing. Understand how to manage containers, handle secrets, and explore Kubernetes vs Docker. This Kubernetes course deal for onboarding or enhancing DevOps skills.

[CBT Nuggets course material](#) →

WEEK 1

Introduction to Kubernetes

154 min.

Introduction to Kubernetes Concepts	12
Understanding Kubernetes Cluster Architecture	8
Methods for Deploying Kubernetes Clusters	11
Kubernetes API Server and kubectl CLI	11
Use eksctl Open Source CLI to Provision K8S Cluster	10
Explore EKS Cluster Resources and Clean Up	12

Understanding Storage Volumes in Kubernetes

Overview	1
Introduction to Kubernetes Storage Volumes	12
Share Data Across Pod Containers with Ephemeral Volumes	15
Create a Kubernetes PersistentVolume using Amazon EBS Plugin	12
Bind PV to Pod with Persistent Volume Claim in Kubernetes	11
Define Custom Storage Classes in Kubernetes	14

Intro to Kubernetes Native Pipelines with Tekton

Overview	1
Intro to Tekton Pipelines on Kubernetes	15
Learn Tekton Task Resources	7

WEEK 2

154 min.

Tekton Pipeline Concepts	9
Install Tekton on Kubernetes Clusters	9
Create and Run Tekton Tasks on Kubernetes	17

Create Tasks and Pipelines in Tekton

Overview	1
Intro to Tekton Task and Pipeline Creation	7
Emitting Results from Tekton Tasks	12
Share Data Between Tekton Task Steps	12
Create and Execute Your First Tekton Pipeline	12
Orchestrate Multiple Tekton Tasks with Pipelines	7

Managing Kubernetes Data with PowerShell

Overview	1
Intro to Kubernetes and PowerShell	9
Extracting Data Fields from Kubernetes Objects	14
Filtering Kubernetes Objects with PowerShell	11
Author PowerShell Functions for Kubernetes Management	17

Manage Kubernetes Resources with Python

Overview	1
Intro to Managing Kubernetes with Python	12

WEEK 3

61 min.

Setting Up Kubernetes Python Module	17
Manage Namespaces on Kubernetes with Python	18
Audit Deployment Controllers on Kubernetes with Python	17

Simplify Monitoring and Debugging Kubernetes with Botkube

Overview	1
Intro to ChatOps and Botkube for Kubernetes	1

Overview of Botkube Features and Integrations	1
Create Kubernetes Environment for Botkube	1
Create Slack App Integration for Botkube	1
Install Botkube into Kubernetes Cluster with Helm Chart	1
Explore Botkube Capabilities from Slack Workspace	1