

Certified Kubernetes Application

Structured technical training and certification preparation

A practical, student-friendly outline covering course Overview, kubernetes and Container Fundamentals, configuration, multi Container Pods, and observability.

MODULES

10

LESSONS

68

FORMAT

Self-paced

Module Breakdown

<p>MODULE 1</p> <p>Course Overview</p> <ul style="list-style-type: none">1.1 Course Overview1.2 Course PreReqs	<p>MODULE 2</p> <p>Kubernetes and Container Fundamentals</p> <ul style="list-style-type: none">2.1 Core Concepts2.2 What is the CKAD Exam2.3 Why Get Certified2.4 CKAD Exam Domains2.5 APIs2.6 Demo - Explore APIS2.7 Pods2.8 Whiteboard - Pod Creation Workflow2.9 Create a Pod2.10 Lifecycle Status2.11 Inspecting Pods2.12 Demo - Create a Pod and Inspect
<p>MODULE 3</p> <p>Configuration</p> <ul style="list-style-type: none">3.1 Configuration3.2 Understand Configmaps3.3 Understand Security Contexts3.4 Demo - Create a Security Context3.5 Create and Consume Secrets3.6 Understand Service Accounts3.7 Demo - Create a Pod to Use a Secret3.8 Demo - Define a Service Account	<p>MODULE 4</p> <p>Multi Container Pods</p> <ul style="list-style-type: none">4.1 Multi Container Pods4.2 Multi Container Pods Design and Patterns4.3 Ambassador Containers4.4 Connecting to Pods4.5 Side Cars4.6 Demo - Create an Init Container

Module Breakdown (continued)

<p>MODULE 5</p> <p>Observability</p> <ul style="list-style-type: none">5.1 Observability5.2 Container Health5.3 Probes5.4 Logging5.5 Monitor Resources and Apps5.6 Monitoring Pods5.7 Demo - Monitoring and Logging	<p>MODULE 6</p> <p>Pod Design</p> <ul style="list-style-type: none">6.1 Pod Design6.2 Deployments6.3 Rolling Updates6.4 Pod Changes6.5 Jobs and Crons6.6 Labels and Annotations6.7 Demo - Define and Query Labels6.8 Scalability Options
<p>MODULE 7</p> <p>Services and Networking</p> <ul style="list-style-type: none">7.1 Services and Networking7.2 Understanding Networking, Routing and Services7.3 Network Policies7.4 Namespaces7.5 Demo - Networking	<p>MODULE 8</p> <p>State Persistence</p> <ul style="list-style-type: none">8.1 State Persistence8.2 Storage Options8.3 Volume Storage8.4 Configure Pod Volumes8.5 Configure Persistent Volumes8.6 Whiteboard - Persistent Volumes
<p>MODULE 9</p> <p>CKA Practice Exams</p> <ul style="list-style-type: none">9.1 CKAD Practice Preparation9.2 Exam Prep Need to Know9.3 Question 1 - Create a Pod and Inspect9.4 Question 2 - Define a Pods Readiness9.5 Question 3 - Create a Pod with a Secret9.6 Question 4 - View Pods logs in Real Time9.7 Question 5 - Define and query labels9.8 Additional Questions	<p>MODULE 10</p> <p>Course Closeout</p> <ul style="list-style-type: none">10.1 Course Closeout10.2 Course Summary Review10.3 Kubernetes Certifications10.4 Additional Resources10.5 Exam Review10.6 Course Closeout