

This document provides the curriculum outline of the Knowledge, Skills and Abilities that a Certified Kubernetes Application Developer (CKAD) can be expected to demonstrate.

CKAD Curriculum

13% - Core Concepts

- Understand Kubernetes API primitives
- Create and configure basic Pods

18% - Configuration

- Understand ConfigMaps
- Understand SecurityContexts
- Define an application's resource requirements
- Create & consume Secrets
- Understand ServiceAccounts

10% Multi-Container Pods

- Understand Multi-Container Pod design patterns (e.g. ambassador, adapter, sidecar)

18% - Observability

- Understand LivenessProbes and ReadinessProbes
- Understand container logging
- Understand how to monitor applications in Kubernetes
- Understand debugging in Kubernetes

20% - Pod Design

- Understand Deployments and how to perform rolling updates
- Understand Deployments and how to perform rollbacks
- Understand Jobs and CronJobs
- Understand how to use Labels, Selectors, and Annotations

13% - Services & Networking

- Understand Services
- Demonstrate basic understanding of NetworkPolicies

8% - State Persistence

- Understand PersistentVolumeClaims for storage