

# Certified DevOps Architect



GSDC Certified DevOps Architect is designed for professionals who possess advanced skills in architecting and implementing DevOps practices and technologies.



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## ABOUT CERTIFICATION

With a strong emphasis on practical knowledge, the CDA certification equips you with the necessary tools and techniques to successfully lead and streamline the software development lifecycle.

By earning this certification, you demonstrate your proficiency in integrating development, operations, and quality assurance processes, enabling organizations to achieve faster delivery, improved collaboration, and increased business agility.

The DevOps Architect certification is a highly recognized credential that validates your expertise as a DevOps Architect.

As a Certified DevOps Architect, you are equipped to drive innovation, enhance operational efficiency, and deliver high-quality software solutions. Stay ahead in this rapidly evolving technology landscape and unlock exciting career opportunities with the globally recognized CDA certification.

## OBJECTIVES

1. Understand the current delivery pipeline.
2. To develop action plans for DevOps transformation.
3. Architect and implement efficient DevOps practices.
4. Integrate development, operations, and quality assurance.
5. Streamline software development lifecycle for agility.
6. Drive innovation and enhance operational efficiency.
7. Enable faster and more collaborative software delivery.
8. Lead teams to deliver high-quality solutions.
9. Stay ahead in the evolving technology landscape.

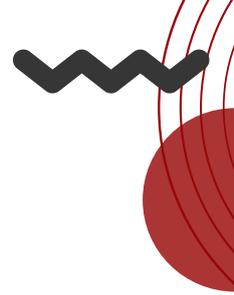
## Our Accreditation:



The Global Skill Development Council (GSDC) is the leading third-party, Vendor neutral, international credentialing and certification organization. The Global Skill Development Council (GSDC) is proud to be ANSI Accredited Member. The American National Standards Institute (ANSI) is a private, non-profit organization that administers and coordinates the U.S. voluntary standards and conformity assessment system.

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# COURSE SYLLABUS

## 1. Introduction to DevOps:

- What is DevOps?
- Why DevOps?
- What is Continuous Deployment?
- What is Continuous Integration

## 2. Lab Setup:

- Lab Setup process on Google Cloud and AWS

## 3. GIT - Version Control System:

- What is Version Control System
- Types of VCS
- Introduction to GIT Architecture
- Logs and Diff Command in GIT
- Removing files from wd and local repository
- GIT Ignore
- GIT Checkout
- GIT Reset
- Branching, Merging and Conflicts in GIT
- GIT Stash
- Remote Repository Github
- Git Clone
- GIT Pull
- GIT Fetch

## 4. MAVEN - Build Automation Tool:

- Why and What is Maven?
- Maven LifeCycle and Architecture
- Pom file in Maven
- Maven Installation

## 5. JENKINS:

- Introduction to Jenkins
- Jenkins Setup and Launch
- CICD Pipeline in Jenkins
- Maven Jobs in JENKINS
- Create Pipeline in JENKINS
- Distributed Architecture in Jenkins
- Adding linux slave to jenkins master
- Jenkins Pipeline
- Jenkins File
- Multiconfiguration Project type in Jenkins

## 6. DOCKER:

- VMS Vs Containers
- Docker Architecture

- Container LifeCycle
- Docker Volumes
- Attaching volume to containers
- Creating volume with v flag
- Migrating Docker volumes

## 7. Docker Swarm - Container Orchestrator Tool:

- Docker Swarm - 1
- Docker Swarm - 2
- Setup
- Swarm cluster scaling and load balancing

## 8. Docker Machine:

- Introduction to Docker Machine
- Creating docker hosts on GCP

## 9. Kubernetes with Amazon EKS:

- Introduction to Kubernetes and its Architecture
- What is Amazon EKS
- Kubernetes Cluster Setup
- Pods in Kubernetes
- LoadBalancer Service
- Blue Green Deployment in Kubernetes
- Autoscaling in Kubernetes cluster with EKS



# GSDC Technical Advisory Board :



The GSDC is the leading certification association which brings together innovative organizations and founding thought-leaders as Technical Advisors from over 40 countries to design curriculum on Blockchain, Devops, Six Sigma & Agile Certifications.

## Our Future Information **Target Audience**

- IT Manager, Project Manager Development Managers, Engineering Managers
- Configuration Managers, Release Managers
- Build Engineer, Development Leads, Developers, UI/UX Developers
- Infrastructure Architects, System Architects
- Product Managers, Product Owners

## **Pre-requisites**

There is no such recommended experience required for getting this certification.

**Find out more online at**  
**[www.gsdccouncil.org](http://www.gsdccouncil.org)**

