

# Certified DevOps Engineer



Certified DevOps Engineer Certification governed by GSDC is focused on understanding the DevOps framework from a practical tools implementation perspective.



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## ABOUT CERTIFICATION

DevOps Engineer Certification qualifies various aspects of the principles of continuous development and deployment, software development operations, continuous integration, automation of configuration management, and learns the various tools like Git, Docker, Jenkins, Nagios, Puppet, Ansible, and Kubernetes. Hence, this DevOps Certification cost is completely worth it.

The focus is to understand DevOps right from the cultural change and leading to an understanding of various roles & responsibilities, cross-functional team structure, and the importance of automation for achieving benefits from successful DevOps implementation

## OBJECTIVES

1. Understand the DevOps Concepts and DevOps Tools.
2. Continuous Integration & Continuous Delivery.
3. Spread knowledge about popular tools to achieve 360-degree automation.
4. Make the participants aware of implementation Strategies.
5. Understand the concept of DevOps and the need for DevOps.
6. Understand cloud computing and virtualization.
7. Learn and Manage Version control with GIT.
8. Create and configure lightweight, reproducible, and portable development environments with Vagrant.
9. Perform Configuration management using Puppet.
10. Implementation of Continuous Integration (CI) with Jenkins.
11. Implementation of infrastructure monitoring with Nagios.
12. Understand containers using Docker.
13. Perform Configuration management using Chef.
14. Get hands-on practice on all the major components covered in this course.

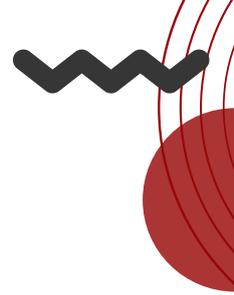
## Our Accreditation:



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. What is the DevOps:

- Benefits of DevOps
- DevOps Principal

## 2. Introduction to CI/CD:

- Continuous Integration & Continuous Delivery With Jenkins
- Introduction to Jenkins
- SDLC and DevOps culture
- Jenkins features and architecture

## 3. Introduction about Cloud (IaaS, SaaS, PaaS) - LAB:

- What is the cloud benefits (Create the account in AWS - free for 1 years since we will use the AWS)
- What is the cluster
- How to create the cluster in AWS
- How to access the AWS Cluster (EC2) machine from my local system for install the other software

## 4. Getting Started With Jenkins - LAB:

- Install Jenkins
- Configure Jenkins
- Get started with Jenkins
- Setup Jenkins job
- Jenkins pipeline view
- Install Artifactory

## 5. DevOps tool - Repository - LAB:

- Understand the repository GIT
- Benefit and how to use and checking checkout code from GIT
- How version controlling happening?
- Create the Repository on the fly

## 6. Build Jobs and Configurations

## 7. CI & CD Pipeline With Jenkins, Gradle & Artifactory - LAB:

- Build CI and CD pipeline with Jenkins and Gradle
- Configure Artifactory
- Build CI and CD pipeline with Jenkins and Gradle (contd.)

## 8. CI & CD Pipeline With Jenkins & Maven - LAB:

- Create Java application project
- Start building CI and CD pipeline with Jenkins and Maven
- Start building CI and CD pipeline with Jenkins and Maven #2

- Start building CI and CD pipeline with Jenkins and Maven #3

## 9. Configuring Build Pipelines - LAB

## 10. Automated Testing In Jenkins - LAB

## 11. Code Quality Improvement using Jenkins - LAB

## 12. Automated Deployment and Continuous Delivery - LAB

## 13. Distributed System In Jenkins - LAB

## 14. Docker overview and understanding - LAB:

- Docker Architecture
- Docker benefits
- Docker installation in AWS
- Deploy the image in AWS cluster
- Run the application
- Docker commands

## 15. How to monitor application logs using ELK - LAB:

- What is the kibana and how to install the how to use it.



# 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**

- Software Development Professionals
- IT Service Management Professionals
- Project & Program Managers
- Business Analysts
- Testing Professionals
- Data Center Professionals
- Release Managers
- Change Managers
- System Architects
- System Engineers

## **Pre-requisites**

Knowledge of software development, preferably in Java and the UNIX/Linux .

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

