

Certified DevOps Master



The DevOps Master Certification offered by GSDC is designed to provide comprehensive knowledge and practical expertise in implementing the DevOps framework.

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ABOUT CERTIFICATION

By obtaining the Certified DevOps Master qualification, individuals demonstrate proficiency in multiple aspects of continuous development and deployment, software development operations, continuous integration, and configuration management automation. This certification equips learners with a deep understanding of essential tools such as Git, Docker, Jenkins, Nagios, Puppet, Ansible, and Kubernetes. The primary objective of the Certified DevOps Master program is to foster an appreciation for the cultural shift inherent in DevOps, as well as to cultivate awareness of different roles and responsibilities within cross-functional teams. Additionally, participants gain insight into the pivotal role of automation in achieving the benefits associated with successful DevOps implementation..

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

CDP

1. Introduction to DevOps:

- History of DevOps
- What is DevOps?
- DevOps Ecosystem
- DevOps Objectives
- DevOps Market Trends

2. Challenges with Current IT Practices:

- Development & Feedback Cycle
- Innovation & Collaboration
- Deployment Failures
- Recovery & Rollback Time
- Total Cost of Ownership
- Process Inefficiencies

3. DevOps Principles:

- Understanding DevOps Guiding Principles
- Importance of Collaborative Culture
- Cross-Functional Team Structure
- Automation

4. Organizational Considerations for DevOps Adoption:

- Embracing DevOps Mindset
- Iterative Adoption
- Business Goals

5. Role of DevOps in Digital Transformation:

- Understanding Digital Transformation
- Why does digital transformation matter?
- Importance of DevOps in Digital Transformation

6. DevOps Culture:

- Organizational Change
- Breaking the Silos
- Team Structure

7. DevOps and Automation:

- Version Control
- Continuous Integration
- Continuous Testing
- Configuration Management
- Continuous Deployment
- Containerization
- Continuous Monitoring

8. DevOps and Other Processes:

- ITSM
- Agile
- Scrum
- Lean

CDE

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

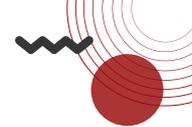
14. Docker overview and understanding - LAB:

- 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.

Find out more online at
www.gsdccouncil.org

