

CERTIFIED DATA PROTECTION OFFICER

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ABOUT CERTIFICATION

GSDC's Certified DevOps Architect focus is to lead the DevOps practices with existing architecture. This Certification syllabus is designed for professionals who are engaged in the designing, implementing, and managing the DevOps deployment pipelines and tool chains which are used to support Continuous Integration, Continuous Delivery, Continuous Testing and potentially Continuous Deployment.

Syllabus has strong focus on architecting the DevOps culture, Principles, tools, metrics and DevOps adoption.

This certification positions learners to successfully complete the Certified DevOps Architect exam.

Toward the finish of the course you will learn:

- How to design, implementation, and management of DevOps deployment pipelines and toolchains that support Continuous Integration, Continuous Delivery, Continuous Testing and, potentially Continuous Deployment.
- It helps to understand ways to defining or integrating underpinning processes, metrics, APIs and cultural considerations.
- Comprehensive overview for understanding the DevOps competencies needed to improve time-to-market, flow of value through the Continuous Delivery Pipeline.

OBJECTIVES

The high level learning objectives of Certified DevOps Architect Certification course are as below:

1. Understanding the importance of continuous integration, continuous testing, and be ready to apply for same.
2. Key practices, and roadmap for transforming of a DevOps collaborative culture
3. Apply the concepts of continuous security
4. Understanding current delivery pipeline
5. Measure the flow of value through the delivery pipeline
6. Understanding Continuous Integration (CI), such as version control, builds, and remediation.
7. Understanding Continuous Delivery and Deployment (CD): packaging, containers, and release
8. Understanding Continuous Monitoring (CM): monitoring and analysis infrastructure, process, and apps
9. Understanding Infrastructure and tools: frameworks, tools, and infrastructure as code
10. Learn how to Improve the process of developing, building, and integrating continuously
11. Learn how to Improve the process of continuously deploying to staging and production environments
12. Action plans for DevOps transformation

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.

COURSE SYLLABUS

1. Introduction to DevOps:

- ✓ Course goals
- ✓ Course agenda
- ✓ Introducing DevOps

2. DevOps Concepts:

- ✓ Continuous delivery (CD) definition
- ✓ Architecting for continuous delivery
- ✓ Mapping your Continuous Delivery Pipeline
- ✓ Micro Services Architecture (MSA) and its Characteristics
- ✓ Architecting for Systemic Resilience
- ✓ Moving from Legacy to Smaller Services
- ✓ Relationships between CD, Waterfall, Agile, ITIL, and DevOps
- ✓ Building quality with Continuous Integration

3. DevOps Culture:

- ✓ Importance of culture to the DevOps Architect
- ✓ Cultural Aspects of a DevOps Architect
- ✓ DevOps Environment: Service Mindset and Quality at the Source for DA
- ✓ Assignment: DevOps culture and practices to create flow

4. Design Practices for Continuous Delivery:

- ✓ Primary Principles of Continuous Delivery
- ✓ Continuous Delivery Versus Integration and Deployment
- ✓ Why design is important to continuous delivery
- ✓ DevOps Architect's role in design
- ✓ Key design principles
- ✓ Continuous delivery best practices
- ✓ Microservices and containers

5. Continuous Integration using Jenkins:

- ✓ Jenkins Management
- ✓ Build Setup
- ✓ Test Automation (with Maven)
- ✓ Securing Jenkins
- ✓ Notification System
- ✓ Adding a slave node to Jenkins
- ✓ Building Delivery Pipeline

6. Continuous Delivery and Deployment:

- ✓ Continuous Delivery & Deployment Focus Topics
- ✓ Continuous delivery & deployment with benefits
- ✓ DevOps Architect's role in continuous delivery and deployment
- ✓ Continuous delivery and deployment best practices
- ✓ Assignment: Distinguishing continuous delivery and deployment

7. Continuous Integration:

- ✓ Introduction to Continuous Integration
- ✓ DevOps Architect's role in Continuous integration
- ✓ Importance & Benefits of Continuous integration
- ✓ How to Implement CI
- ✓ Continuous integration best practices
- ✓ Assignment: Optimizing Continuous integration workflows

8. Continuous Testing :

- ✓ Key Concepts, Importance & Benefits of Continuous testing
- ✓ DevOps Architect's role in Continuous testing
- ✓ Describe the importance and strategies for implementing a continuous testing environment
- ✓ Key tenets of Continuous testing
- ✓ Continuous testing best practices
- ✓ Assignment: Handling environment inconsistencies

9. Continuous Monitoring:

- ✓ Key concepts, Importance and Benefits of Continuous monitoring
- ✓ DevOps Architect's role in continuous monitoring
- ✓ Continuous monitoring best practices
- ✓ Assignment: Monitoring build progress

10. Security Assurance:

- ✓ Importance of security assurance
- ✓ DevSecOps and Rugged DevOps defined
- ✓ DevOps Architect's role in security
- ✓ Security best practices

11. Infrastructure and Tools:

- ✓ Importance of infrastructure and tools
- ✓ DevOps Architect's role in infrastructure and tools
- ✓ Building a DevOps tool-chain
- ✓ Infrastructure/tools best practices
- ✓ Assignment: identifying common infrastructure/tool components



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.

Further Information:

Target Audience: The target audience for Certified DevOps Architect Certification is professionals across all IT practices. Anyone who is a part any kind of IT project or wish to understand the DevOps methodology will benefit from this course.

- 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

Certification Available:

- Ethereum developer
- Blockchain Architect
- Hyperledger Developer

You may also be interested in:

- Lean Six Sigma
- DevOps Practitioner

Find out more online at www.gsdccouncil.org