GOOGLE CLOUD TRAINING

Gcp Professional Cloud Devops Engineer Certification Course

Master site reliability engineering and DevOps practices on Google Cloud. Prepare for your GCP Professional Cloud DevOps Engineer certification.

DURATION
2 hours

LEVEL
Intermediate

FORMAT
Instructor-Led

- Globally Recognized Certification
- Expert-Led Hands-On Training
- Flexible Scheduling

Computer Pride | 1st Floor, ICEA Building, Kenyatta Avenue, Nairobi | www.computer-pride.co.ke

COURSE OVERVIEW

The GCP Professional Cloud DevOps Engineer Certification Course is meticulously designed for IT professionals aiming to master the principles of DevOps and Site Reliability Engineering (SRE) within the Google Cloud ecosystem. This course provides a comprehensive understanding of how to build, deploy, manage, and operate highly reliable and efficient cloud-native applications on Google Cloud Platform. You will delve into core technologies such as Google Kubernetes Engine (GKE), Cloud Build, Cloud Monitoring, Cloud Logging, and Terraform, learning to automate every stage of the software delivery lifecycle.

Participants will gain practical skills in designing and implementing continuous integration and continuous delivery (CI/CD) pipelines, managing infrastructure as code, and effectively monitoring and troubleshooting production systems. The curriculum emphasizes Google's best practices for SRE, including incident response, post-mortem analysis, and ensuring service reliability through Service Level Objectives (SLOs) and Service Level Indicators (SLIs). By the end of this course, you will be proficient in leveraging Google Cloud services to enhance operational efficiency, accelerate deployment cycles, and maintain robust, scalable applications.

Achieving this certification demonstrates your expert ability to implement and manage DevOps practices on GCP, significantly boosting your credibility and opening doors to advanced roles in the rapidly expanding cloud industry. It equips you with the knowledge to optimize resource utilization, ensure security and compliance, and drive innovation within your organization by fostering a culture of continuous improvement and operational excellence.

Duration	2 hours
Level	Intermediate
Vendor	Google Cloud

COURSE CURRICULUM

01 Module 1: Foundations of DevOps & SRE on Google Cloud

- Introduction to DevOps and SRE principles
- Understanding Google Cloud's Shared Responsibility Model
- Key Google Cloud Services for DevOps (IAM, VPC, Compute Engine, GKE)
- Building a DevOps culture and collaboration best practices
- Automation and toil reduction strategies

02 Module 2: Implementing Continuous Integration & Delivery

- Designing and building CI pipelines with Cloud Build
- Containerizing applications with Docker and Container Registry
- Deploying applications to GKE using CI/CD
- Automating deployments with Anthos Config Management
- Managing infrastructure as code with Terraform on GCP

03 Module 3: Monitoring, Logging, and Performance Management

- Setting up centralized logging with Cloud Logging and Log Analytics
- Monitoring application and infrastructure health with Cloud Monitoring
- Creating custom dashboards, alerts, and service level objectives (SLOs)
- Tracing requests with Cloud Trace and debugging with Cloud Debugger
- Performance optimization strategies on GCP for various services

04 Module 4: Incident Management & Reliability Engineering

- Developing an effective incident response strategy on Google Cloud
- Utilizing Cloud Monitoring for proactive alerting and incident detection
- Troubleshooting methodologies for complex GCP environments
- Conducting effective blameless postmortems and implementing learnings
- Ensuring high availability, disaster recovery, and backup strategies on GCP

05 Module 5: Security, Compliance, and Cost Optimization in DevOps

- Implementing security best practices in CI/CD pipelines (SecDevOps)
- Managing secrets and sensitive data with Secret Manager
- Ensuring compliance with Policy Enforcement and Organization Policies
- Cost management and optimization techniques for cloud resources
- Infrastructure hardening and vulnerability scanning using Security Command Center

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

> **Cloud DevOps Engineer**

> **Site Reliability Engineer (SRE)**

> **Cloud Automation Architect**

FREQUENTLY ASKED QUESTIONS

Q: How does this certification directly enhance my ability to implement Site Reliability Engineering (SRE) practices within a Google Cloud environment?

This course is heavily focused on practical SRE implementation on GCP. You'll learn how to define and measure Service Level Objectives (SLOs) and Service Level Indicators (SLIs), establish effective error budgets, and use Google Cloud's native monitoring tools (Cloud Monitoring, Cloud Logging, Cloud Trace) to track and improve reliability. It covers incident response strategies, blameless postmortems, and automation of operational tasks, providing you with a comprehensive toolkit to build and maintain highly reliable systems on GCP, aligning with Google's own SRE methodologies.

Q: What level of prior experience with Google Cloud or DevOps concepts is recommended to get the most out of this Professional Cloud DevOps Engineer course?

While there are no strict prerequisites, candidates will significantly benefit from having at least 3-5 years of industry experience, including 1+ years working hands-on with Google Cloud Platform, ideally in an operations, development, or infrastructure role. A foundational understanding of Linux, basic shell scripting, containerization concepts (Docker, Kubernetes), and familiarity with CI/CD principles will provide a strong base for mastering the advanced topics covered in this professional-level course.

Q: Beyond theoretical knowledge, what specific hands-on skills will I acquire that are immediately applicable to a Cloud DevOps Engineer role on Google Cloud?

This course emphasizes practical application. You will gain hands-on expertise in designing and implementing automated CI/CD pipelines using Cloud Build and GKE, deploying infrastructure as code with Terraform, configuring advanced monitoring and logging solutions, establishing effective alerting for system health, and managing incidents efficiently. You'll

develop the crucial skills to architect, implement, and manage secure, scalable, and highly available systems on Google Cloud from a DevOps and SRE perspective.

ABOUT COMPUTER PRIDE

East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+	10,000+	50+
Years of Excellence	Professionals Trained	Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

Location
1st Flr, ICEA Building
Kenyatta Ave, Nairobi

Email
info@computer-pride.co.ke

Phone
+254 705 900 900

www.computer-pride.co.ke