

## **DevOps on Google Cloud Platform**

**Modality: Self-Paced Learning**

**Duration: 4 Hours**

**SATV Value:**

**CLC:**

**NATU:**

**SUBSCRIPTION: Learn, Master**

### **About this Course:**

Looking to accomplish your Google Cloud Platform Certification or just learn more about GCP DevOps options and services? This course will focus on what DevOps is and how it applies to GCP Services. We will cover the major services as they relate to deploying a CI Pipeline or a CD Pipeline. We will also review Kubernetes Engine, App Engine and Cloud Functions.

There will be numerous demos and whiteboard covering topics.

### **Course Objectives:**

- Learn about the basics of DevOps
- Learn how GCP services can complement your On Premises services
- Learn about GCP Services such as Kubernetes Engine, Cloud Functions, App Engine
- Learn about GCP Services such as Cloud Build, Cloud Source Repositories and Container Registry
- Learn about Google Stackdriver, Deployment Manager and Cloud Marketplace
- Learn how to design a CI or CD Pipeline with GCP Services

### **Audiences:**

- Existing Solution Architects and Cloud Developers new to GCP.
- Existing Cloud Managers and Administrators
- Programmers Interested in Deploying Applications on GCP
- People interested in hosting highly scaleable, fault tolerant applications (such as Wordpress and Joomla) on the GCP platform IaaS or PaaS.

### **Prerequisites:**

- Basic Cloud Computing Knowledge
- Sign up for a GCP Free Tier or Credits

### **Course Outline:**

## Introduction

### What is DevOps. The Basics

- What is DevOps
- Preview
- Devops on GCP

### Pipelines and Mainlines

- Continuous Integration (CI)
- Continuous Development (CD)
- Continuous Deployment
- Source Code Management

### App Engine

- App Engine Basics
- App Engine Demo
- App Engine Security Scanner
- App Engine or Kubernetes Engine?

### Kubernetes Engine (Containers)

- Container Basics
- Kubernetes Engine (Containers)
- Kubernetes Engine Clusters Demo
- Kubernetes Engine Federation
- Kubernetes Engine Whiteboard
- Preview

### Development Tools

- Cloud SDK Demo
- Cloud Shell Demo
- Cloud Build Demo
- Cloud Source Repositories Demo
- Container Registry

### Microservices

- Microservices
- Cloud Functions Demo

### Resource Management

- Stackdriver Overview
- Service Accounts

- Demo Service Accounts
- Demo Deploy API
- Cloud Endpoints

### **Infrastructure as Code**

- Deployment Manager
- Cloud Marketplace Demo

### **Resources and Closeout**

- Codelabs Free to Use
- Qwiklabs
- DevOps Webpage
- Stackoverflow
- Diagram Asset Library
- Google Cloud Platform Certifications
- Preview