

GCP: Complete Google Data Engineer and Cloud Architect Guide

Modality: Self-Paced Learning

Duration: 23 Hours

About the Course:

Even though Google Cloud Platform is not the most famous cloud service in the present day, it is for sure the best platform that offers support for high-end machine learning applications. All this is due to TensorFlow, which is a deep learning technology by Google.

A Cloud and Data Engineer Professional earn \$88,000 on average annually.

Course Objective:

At the end of this course, students shall will familiar with:

- Computation and Storage – AppEngine, Compute Engine, and Kubernetes
- Big Data and Managed Hadoop - Dataproc, Dataflow, BigTable, BigQuery, and Pub/Sub
- TensorFlow – complete information about the neural networks, including what they are, how they work, what are the components, how should we train them, and how is it connected to deep learning
- DevOps – Cloud Deployment, Cloud Monitoring, and StackDriver logging
- Cloud Security - Identity and Access Management, Identity-Aware proxying, OAuth, API Keys, and service accounts
- Networking – Shared and Traditional Virtual Private Clouds, the HTTP Layer, Cloud, and CDN Interconnect, Network Load Balancing, and transport layer
- Hadoop Foundations – Open source platforms including Hadoop, Pig, Hive, HBase, and Spark

Audience:

This course targets the following audience:

- Startup owners or IT companies who want to use the Google Cloud Platform
- Individuals interested in learning about cloud architecture, networking, load balancing, and other features of Google Cloud Platform
- Candidates looking for big data solutions and serverless analytics with the Google Cloud Platform
- People who want to build and deploy TensorFlow

Prerequisite:

Candidates must have a basic understanding of IT and some experience with Hadoop.

Course Outline:

- You, This Course and Us
- Introduction
- Compute Choices
- Storage
- Cloud SQL, Cloud Spanner ~ OLTP ~ RDBMS
- The Hadoop Ecosystem
- BigTable ~ HBase = Columnar Store
- Datastore ~ Document Database
- BigQuery ~ Hive ~ OLAP
- Dataflow ~ Apache Beam
- Dataproc ~ Managed Hadoop
- Pub/Sub for Streaming
- Datalab ~ Jupyter
- TensorFlow and Machine Learning
- Regression in TensorFlow
- Vision, Translate, NLP and Speech: Trained ML APIs
- Networking
- Ops and Security