



 Cognixia[®]

GCP- Google Cloud Platform

www.cognixia.com

About Cognixia

Cognixia- A Digital Workforce Solutions Company is dedicated to delivering exceptional trainings and certifications in digital technologies. Founded in 2014, we provide interactive, customized training courses to individuals and organizations alike, and have served more than 100,000 professionals across 37 countries worldwide.

Our team of more than 4,500 industry experts facilitate more than 400 comprehensive digital technologies courses, along with state-of-the-art infrastructure, to deliver the best learning experience for everyone. Our comprehensive series of instructor-led online trainings, classroom trainings and on-demand self-paced online trainings cover a wide array of specialty areas, including all of the following:

- IoT
- Big Data
- Cloud Computing
- Cyber Security
- Machine Learning
- AI & Deep Learning
- Blockchain Technologies
- DevOps

Cognixia is ranked amongst the top five emerging technologies training companies by various prestigious bodies. We're also an MAPR Advantage Partner, Hortonworks Community Partner, RedHat Enterprise Partner, Microsoft Silver Learning Partner and an authorized training partner for Dell EMC, Pivotal, VMware and RSA technologies.



OUR AWARDS & AFFILIATIONS

 **Best Workplace Amongst Emerging Enterprises** Awarded By **Great Indian Workplace Awards – 2018** Mumbai, India



 **Best Training Provider of the Year** Awarded By **The Golden Globe Tiger Awards – 2018** Kuala Lumpur, Malaysia



World HRD Congress has awarded for Excellence in Training (Asia) 

  **WORLD HRD CONGRESS** Cognixia is awarded as Training Company of the Year, 2018



ISO 9001:2015 Certified Quality Management System



ISO/IEC 27001:2013 Certified Information Security Management System



Best Emerging Technology Training Organization at the Middle East Training & Development Leadership Awards 2018 

 **TOP 5 CLOUD TRAINING INSTITUTIONS INDIA 2016**  **HIGHER EDUCATION REVIEW**



 **TOP 5 Big Data TRAINING INSTITUTES 2017** 



 **TOP 10 IoT TRAINING INSTITUTES PROMISING IN INDIA 2017** 



 Top 10 IoT Training Companies for the Second consecutive year. 



 **siliconindia** BEST TRAINING PROVIDER **BIG DATA HADOOP DEVELOPER OF THE YEAR 2016** 

 Top 10 IoT Training Institutes – 2016 



  Asian Training & Leadership Award, Dubai 

 **TOP 5 Emerging Technologies TRAINING COMPANIES 2016** 



AUTHORIZED TRAINING PARTNERS FOR



Google Cloud Platform

A quote by Marc Benioff, "The cloud services companies of all sizes...The cloud is for everyone. The cloud is a democracy."The Industry 4.0 era is all about the disruptive technologies and these technologies are not complete without the cloud supporting it.

It is said that the cloud is here to stay! The Google Cloud Platform is one of the three big giants in the cloud computing world. Since its launch in 2008, it has grown on an exponential scale giving tough competition to Azure and AWS. The services provided by GCP in relation to supporting emerging technologies like IoT, Big Data, AI, etc. are making it an ideal choice for many organizations.

"Cloud is about how you do computing, not where you do computing." ~ Paul Maritz, CEO of VMware

The course takes the participants on a journey to become a GCP professional. Live training led by subject matter experts and industry specialists helps the participant reach a level of proficiency in this field.

Industry Trends

Gartner named Google a Leader in the 2019 Gartner Magic Quadrant for Data Management Solutions for Analytics, the evaluation covered Google Cloud's core data analytics offerings along with other services.

The total cloud market is expected to grow from \$182.5 to 331.2 billion in 2022 at a CAGR of 16.1%. – Gartner

IDC and even a report by Great Learning estimated a growth of more than a million cloud computing job roles in India by 2022 – The Economic Times

A 2019 survey suggests 91% of public cloud adoption and 72% of private cloud adoption. – Right Scale

The cloud services are expected to outgrow SaaS with the growth rate of 27% through 2019. - IDC

Eligibility/Prerequisites

Participants are required to have basic networking and OS knowledge. They can log in to GCP portal by using his/her Gmail credentials. Google credits \$300 in GCP account for learning and no extra license is required.

GCP Program Structure

Starting from the introduction to GCP, the course will cover all the topics needed to gain 360-degree knowledge on Google Cloud Platform. With 9 hands-on practical experience and extensive case studies, the course will provide a perfect ladder towards becoming a GCP professional.



DETAILED CURRICULUM : MODULES

Chapter 1: Introduction to Google Cloud Platform

- What is Google Cloud Platform?
- Region and zones
- Understanding GCP console
- GCP security credential

Chapter 2: Google Cloud Storage

- Google cloud storage basic operations
- Bucket and objects
- Cloud storage availability and durability
- Storage classes
- Multi regional storage
- Regional storage
- Nearline storage
- Coldline storage
- Authorization and access control
- Cloud storage data encryption
- Cloud storage versioning
- Cloud storage lifecycle management
- Cloud storage pricing
- **Lab 1:** Cloud Storage

Chapter 3: Google Compute Engine

- Basic architecture of GCE
- Difference between GCE and traditional server
- Machine type
- Firewall rules
- Images

- Persistent disk and durability model of compute engine
- GCP console for compute engine
- Static IP address
- Autoscaling for VM instances
- Basic Cloud monitoring
- **Lab2:** Cloud Compute Engine
- Launch a VM
- Reserve and associate a static IP address to your VM
- Installing WordPress
- Creating persistent disk
- Mounting the additional disk

Chapter 4: Google Cloud SQL

- Core advantages of Google Cloud SQL
- Cloud SQL database instance type
- Access control
- High availability
- Backup options
- Google Cloud SQL pricing
- **Lab3:** Deploying and Scaling an Application
- Creating Google cloud SQL instance
- Configure WordPress to use Google Cloud SQL
- Creating read replica for Cloud SQL Instance
- Configuring WordPress to use read replica
- Verifying read replica

DETAILED CURRICULUM : MODULES

Chapter 5: Load Balancer

- Fundamental of Load Balancer
- Network Load Balancer
- HTTP (S) Load Balancer
- Internal Load Balancer
- SSL Load Balancing

Chapter 6: Google Cloud Monitoring

- Stackdriver monitoring
- Stackdriver debugger
- Stackdriver trace
- Stackdriver logging
- Stackdriver error reporting
- Stackdriver monitoring API

Chapter 7: Autoscaling

- Overview of Autoscaling
- Autoscaling Component
- **Lab 4:** Scaling the Application using Google Cloud Load Balancing
- Create an Image of a Persistence
- Launch Instance Group
- Create Load Balancer
- Setup Autoscaling

Chapter 8: Virtual Private Cloud Network

- Virtual Private Cloud (VPC) networking fundamentals
- Firewall
- Internal DNS

- Network Routes
- **Lab 5:** Hosting Secure Applications in Google Cloud VPC Networks
- Creating a Network with a Web-Network and DB-Network
- Launching Web Server and DB Server
- Generate SSH key pair and add it to your Project
- Launching NAT Server and configuring it to Forward Traffic from DB server to Internet

Chapter 9: Cloud Identity and Access Management (IAM)

- Introduction
- User and Service Account
- IAM Roles
- Policy
- **Lab 6:** Managing Users, Policies and Granting Roles using Service Accounts
- Creating a Service account and granting Roles
- Remove the Owner Role from the service account and try to list the content of the bucket

Chapter 10: Cloud CDN

- What is CDN
- Google Cloud CDN
- Cloud CDN Concept
- Some of the Cloud CDN edge locations
- Cloud DNS
- Supported Record Types
- **Lab 7:** Moving an Existing Domain Name to Cloud DNS
- Launch a WordPress site using Marketplace

DETAILED CURRICULUM : MODULES

- Registering a domain with Freenom.com
- Creating the managed zone and Records sets in Cloud DNS
- Changing the Freenom Name server to Google's Name Server

Chapter 11: Google Cloud Deployment Manager

- Deployment Manager Fundamentals
- Runtime configurator
- Waiters
- **Lab 8:** Generating and Creating Cloud Deployment Manager Template
- Creating an Infrastructure Using a Configuration File

Chapter 12: Google Container Engine

- Google Container Engine
- Docker Overview
- Kubernetes Terminologies
- Replication Controller
- Deployment
- **Lab 9:** Deploying WordPress Cluster using Container Engine
- Creating Container Engine Cluster
- Creating PODs and Services for MYSQL and WordPress Containers

Chapter 13: Cloud PUB / SUB

- Overview of Cloud PUB / SUB
- PUB / SUB Concepts and Message Flow
- DATA Model
- Big Query Overview
- Overview of Cloud Big Table

Chapter 14: Cloud Datastore

- Overview of Cloud Datastore
- Limits
- Storage Size
- Multitenancy
- Benefits of Multitenancy
- Encryption
- Locations

Cognixia USPs



LIFETIME LMS ACCESS



24 x 7 SUPPORT



REAL-LIFE PROJECTS & CASE STUDIES



INDUSTRY EXPERTS AS TRAINERS



INDUSTRY STANDARD CERTIFICATE



POTENTIAL CAREER OPTIONS

ASSOCIATE CLOUD ENGINEER

PROFESSIONAL CLOUD ARCHITECT

PROFESSIONAL DATA ENGINEER

PROFESSIONAL CLOUD DEVELOPER

PROFESSIONAL CLOUD NETWORK ENGINEER

PROFESSIONAL CLOUD SECURITY ENGINEER

PROFESSIONAL CLOUD ANALYST



GCP- Google Cloud Platform



To learn more visit
www.cognixia.com