

CAREER PROGRAM · SYLLABUS · GROWTH & CLOUD

GCP Cloud Engineering

Get hands-on with Google Cloud Platform — compute, storage, BigQuery, Kubernetes Engine, and IAM — building and deploying real production applications on GCP.

DURATION
10 Weeks**COMMITMENT**
8–10 hrs/week**LEVEL**
Intermediate**FORMATS**
Online Live · Offline
(Coimbatore) · Self-
Paced

Tools & tech stack

GCP Compute

Cloud Storage

BigQuery

GKE

Cloud IAM

Google Cloud Platform

Compute Engine

Cloud Functions

Terraform

ChatGPT

Claude

Perplexity

Who it's for

- Developers who want GCP-specific skills for cloud roles or GCP-based data/AI work

What you'll learn

- Core GCP compute and storage services
- BigQuery for data warehousing and analytics
- Deploying containerized apps on GKE
- IAM and cost management on GCP

Curriculum

01 Part 1: Data Engineering and Cloud Foundations

- Data Engineering Roles and Lifecycle
- Data Architecture Fundamentals
- Reliability and Data Quality

02 Part 2: Python SQL Linux and Git

- Python for Data Pipelines
- SQL for Data Engineering
- Linux Git and Development Workflow

03 Part 3: Google Cloud Platform Foundations

- Resource Hierarchy Billing and Tools
- Identity Access and Secrets
- Networking Compute and Serverless

04 Part 4: Cloud Storage and Data Ingestion

- Cloud Storage
- Batch Ingestion and Transfer Services
- Event Driven Ingestion

05 Part 5: BigQuery Data Warehouse

- BigQuery Architecture and Loading
- Warehouse Modelling and SQL
- Performance Cost and Security
- BigQuery Operations and Analytics

06 Part 6: Batch Processing with Dataflow and Dataproc

- Apache Beam Fundamentals
- Dataflow Batch Pipelines
- Dataproc and Spark

07 Part 7: Streaming Data Engineering

- Pub Sub Fundamentals
- Beam Windowing and Triggers
- Dataflow Streaming Operations

08 Part 8: Databases and Data Serving

- Cloud SQL AlloyDB and Spanner
- Bigtable Firestore and Memorystore
- Serving and Data APIs

09 Part 9: Transformation Orchestration and Integration

- Cloud Composer and Airflow
- Dataform and SQL Transformation
- Integration Services

10 Part 10: Governance Security and Data Quality

- Dataplex Universal Catalog
- Security Privacy and Compliance
- Data Quality Observability and Governance

11 Part 11: Infrastructure Automation Monitoring and Cost

- Terraform and Infrastructure as Code
- CI CD and Release Engineering
- Monitoring Reliability and Cost Optimisation

12 AI Pro

- Using Claude, ChatGPT, and Perplexity for Google Cloud Infrastructure Work
- Verifying AI-Suggested GCP Configurations Before Applying Them
- Project: AI-Assisted GCP Configuration with Scope and Role Verification

Projects

- Deployed web app on Compute Engine with a load balancer
- BigQuery data warehouse with scheduled queries
- Containerized microservice deployed to GKE

- Serverless data pipeline using Cloud Functions and Cloud Storage triggers

Self-paced from ₹1,999 · EMI options available · certificate released for a one-time ₹100 fee · batch dates and fees confirmed at enrolment

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