

Data Engineering on Google Cloud

COURSE OVERVIEW

This course provides you with a hands-on introduction to designing and building data processing systems on Google Cloud Platform. Through a combination of presentations, demos, and hand-on labs, you will learn how to design data processing systems, build end-to-end data pipelines, analyze data and carry out machine learning. The course covers structured, unstructured, and streaming data. Learn how to design and build data processing systems.

WHO SHOULD ATTEND?

This course is designed for experienced developers responsible for managing big data transformations, including tasks such as extracting, loading, transforming, cleaning, and validating data. Participants will also focus on designing data processing pipelines and architectures, developing and maintaining machine learning and statistical models, as well as querying datasets, visualizing query results, and generating comprehensive reports.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Design and build data processing systems on Google Cloud Platform.
- Learn about the new developments in PPP.
- Derive business insights from extremely large datasets using Google BigQuery.
- Train, evaluate, and predict using machine learning models with TensorFlow and Cloud ML.
- Leverage unstructured data using Spark and ML APIs on Cloud Dataproc.
- Enable instant insights from streaming data.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Designing and building data processing systems on Google Cloud.
- Building data pipelines using Apache Beam and Dataflow.
- Working with BigQuery for analytics and data warehousing.
- Implementing data lakes using Cloud Storage.
- Orchestrating data workflows with Cloud Composer (Apache Airflow).
- Real-time data processing with Pub/Sub and Dataflow.
- Data transformation and cleansing using Dataprep.
- Machine learning model deployment with Vertex AI.
- Managing and securing data pipelines and datasets.
- Hands-on labs and practical use cases on Google Cloud Platform (GCP).

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded