

Training: Google Cloud  
Introduction to Data Analytics on Google Cloud

## TRAINING GOALS:

This course is an introduction to data analytics on Google Cloud. It is designed for learners who have no prior experience with data analytics or Google Cloud. The course covers the basics of data analysis, including collection, storage, exploration, visualization, and sharing. It also introduces learners to Google Cloud's data analytics tools and services. Through video lectures, demos, quizzes, and hands-on labs, the course demonstrates how to go from raw data to impactful visualizations and dashboards.

### What you'll learn

- Describe the data analytics workflow on Google Cloud and summarize the different types of analytics.
- Identify Google Cloud data analytics products and describe how each is used to work with data.
- Describe data sources, data structures, and data storage options in Google Cloud.
- Use BigQuery, Looker, and Looker Studio to answer data questions and influence business decisions.

### Audience

Data analysts and any other individuals who are interested in learning about data analytics tools and techniques on Google Cloud.

## CONSPECT:

- Module 1 - Understand the Data Analytics Lifecycle on Google Cloud
  - Topics
    - Data analytics workflow
    - Data sources
    - Storage methods
    - Google Cloud data analytics products

- Data types
- Objectives
  - Detail and describe the data analytics workflow on Google Cloud.
  - Compare and contrast data sources and storage methods available in Google Cloud.
  - Compare how different data types can be used for data analytics.
- Activities
  - Quiz
- Module 2 - Explore Data and Extract Insights by Using BigQuery
  - Topics
    - BigQuery services, capabilities, and organization
    - Data storage
    - Basic SQL
    - Answering data-driven questions
  - Objectives
    - Describe BigQuery and the BigQuery solution architecture.
    - Derive insights from data by using BigQuery.
    - Use the BigQuery user interface to run basic queries
  - Activities
    - Lab 1: BigQuery Qwik Start: Console
    - Lab 2: Introduction to SQL for BigQuery and Cloud SQL
    - Lab 3: BigLake: Qwik Start
    - Lab 4: Analyze data with Gemini Assistance
    - Quiz
- Module 3 - Make Data-Driven Decisions by Using Looker
  - Topics
    - Looker data exploration terms and concepts
    - Looks and dashboards
    - Visualizations
    - Report sharing
    - Looker Studio
  - Objectives
    - Manipulate a Looker Explore to answer data-driven questions.
    - Create a situation-appropriate visualization to highlight the answer for a datadriven question.
    - Choose between Looker and Looker Studio for data visualization and sharing.
    - Share visualizations with others.

- Activities
  - Lab 1: Looker Data Explorer - Qwik Start
  - Lab 2: Looker Data Studio - Qwik Start
  - Quiz
- Module 4 - Course Summary
  - Topics
    - Topic review
    - Slides
  - Objectives
    - Find resources for additional learning and support.

## REQUIREMENTS:

- Basic familiarity with SQL
- Basic understanding of data concepts such as data types (relational, non-relational) and storage (data lakes, data warehouses)

## Difficulty level



## CERTIFICATE:

The participants will obtain certificates signed by Google Cloud Platform.

## TRAINER:

Authorized Google Cloud Platform Trainer.