

Introduction to Data Analytics on Google Cloud

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.

**DURATION**

1 day

**LEVEL**

100 - Introductory

**FORMAT**

Instructor-led

**SCALABLE**

1-16, scaled to 1000

What you'll learn

- 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.

Overview	4 modules · 6 labs
Who this course is for	• Data analysts
Products	• Data Studio • Looker • BigQuery Studio • Lakehouse
Prerequisites	• Basic familiarity with SQL • Basic understanding of data concepts such as data types (relational, non-relational) and storage (data lakes, data warehouses)
Not covered	• In-depth SQL • BigQuery • ML instruction • Google Sheets

Module 01

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 02

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 03

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 data-driven 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 04

Course Summary

Topics

- Topic review
- Slides

Objectives

- Find resources for additional learning and support.