Google BigQuery for Data Analysts

Duration: 2 Days Course Code: GO8327

Overview:

This course is designed for data analysts who want to learn about using BigQuery for their data analysis needs.

Through a combination of videos, labs, and demos, we cover various topics that discuss how to ingest, transform, and query your data in BigQuery to derive insights that can help in business decision-making.

Products:
- BigQuery

Updated July 2026

Target Audience:

- Data analysts who want to learn how to use BigQuery for their data analysis needs.

Objectives:

- **After this course participants should be able to:**
- Learn the purpose and value of BigQuery, Google Cloud's enterprise data warehouse, and discuss its data analytics features.
- Analyze large datasets in BigQuery with SQL.
- Clean and transform your data in BigQuery with SQL.
- Ingest new BigQuery datasets, and discuss options for external data sources.
- Review visualization principles, and use Connected Sheets and Looker Studio to visualize data insights from BigQuery.
- Use Dataform to develop scalable data transformation pipelines in BigQuery.
- Use new integrations and assistive capabilities introduced with BigQuery Studio.

Prerequisites:

- Introduction to Data Analytics on Google Cloud

Testing and Certification

None

Follow-on-Courses:

No recommendation

Content:

Module 0: Course introduction

- Introduce the topics covered in the course.

Module 1: BigQuery for data analysts

- Identify analytics challenges faced by data analysts, and compare big data on-premises versus in the cloud.
- Learn the purpose and value of BigQuery, Google Cloud's enterprise data warehouse, and discuss its data analytics features.

Module 2: Exploring and preparing your data with BigQuery

- List common data exploration techniques.
- Review SQL query basics.
- Enrich queries with functions, unions, and joins.
- Lab: Exploring an Ecommerce Dataset using SQL in Google BigQuery
- Lab: Troubleshooting Common SQL Errors with BigQuery
- Lab: Troubleshooting and Solving Data Join Pitfalls

Module 3: Cleaning and transforming your data

- Identify what makes a good dataset.
- Clean and transform data using SQL.
- Clean and transform data with other options.

Module 4: Ingesting and storing new BigQuery datasets

- Review differences between permanent and temporary data tables.
- Ingest and store new BigQuery datasets.
- Discuss options for external data sources.
- Lab: Creating New Permanent Tables
- Lab: Ingesting and Querying New Datasets

Module 5: Visualizing your insights from BigQuery

- Review data visualization principles and common visualization pitfalls.
- Use Connected Sheets and Looker Studio to visualize data insights from BigQuery.
- Discuss running analyses in a Jupyter Notebook.
- Lab: Connected Sheets Qwik Start
- Lab: Explore and Create Reports with Looker Studio

Module 6: Developing scalable data transformation pipelines in BigQuery with Dataform

- Use Dataform to develop scalable data transformation pipelines in BigQuery.
- Learn how to get started with Dataform by creating a repository and development workspace.
- Create and execute a SQL workflow in Dataform.
- Demo
- Lab: Create and Execute a SQL Workflow in Dataform

Module 7: BigQuery Studio

- Introduce BigQuery Studio.
- Use Duet AI in BigQuery to explain and generate SQL queries.
- Learn about new usability features and integrations with Dataform and Dataplex in the new BigQuery Studio interface.
- Demo
- Lab: Analyze Data with Duet AI Assistance
- Lab: Generate Personalized Email Content with BigQuery Continuous Queries and Gemini

Module 8: Summary

- Summarize the key topics covered in the course.

Additional Information:

Official course book provided to participants

Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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