

BigQuery for Data Analysts

Category: AI, Data & Analytics | **Vendor:** Google Cloud

Duration: 16.00 hours (2 days)

13.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course 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.

About This Course

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.

Who Should Attend

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

Prerequisites & Entry Requirements

General Prerequisites:

- Introduction to Data Analytics on Google Cloud (IDAGC)

Learning Outcomes

Upon successful completion of this course, participants will 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.

Detailed Course Outline

Module 0 - Course Introduction

Topics:

- This module introduces the course agenda.

Objectives:

- Introduce the topics covered in the course.

Module 1 - BigQuery for data analysts

Topics:

- Overview
- Data analytics on Google Cloud
- From data to insights with BigQuery
- Real-world use cases of companies transformed through analytics on Google Cloud

Objectives:

- 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

Topics:

- Overview
- Common data exploration techniques
- Analysis of large datasets with BigQuery
- Query basics
- Working with functions
- Enriching your queries with UNIONs and JOINs

Objectives:

- List common data exploration techniques.
- Review SQL query basics.
- Enrich queries with functions, unions, and joins.

Activities:

- 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

Topics:

- Overview
- Five principles of dataset integrity
- Clean and transform data using SQL
- Clean and transform data: Other options

Objectives:

- 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

Topics:

- Overview
- Permanent versus temporary data tables
- Ingesting new datasets
- External data sources

Objectives:

- Review differences between permanent and temporary data tables.
- Ingest and store new BigQuery datasets.
- Discuss options for external data sources.

Activities:

- Lab: Creating New Permanent Tables
- Lab: Ingesting and Querying New Datasets

Module 5 - Visualizing your insights from BigQuery

Topics:

- Overview
- Data visualization principles

- Connected Sheets
- Common data visualization pitfalls
- Looker Studio
- Analysis in a notebook

Objectives:

- 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.

Activities:

- Lab: Connected Sheets Qwik Start
- Lab: Explore and Create Reports with Looker Studio

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

Topics:

- Overview
- What is Dataform?
- Getting started with Dataform

Objectives:

- 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.

Activities:

- Demo
- Lab: Create and Execute a SQL Workflow in Dataform

Module 7 - BigQuery Studio

Topics:

- BigQuery Studio: What and why?
- Unified analytics
- Asset management
- Embedded assistance

Objectives:

- 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.

Activities:

- Demo
- Lab: Analyze Data with Duet AI Assistance
- Lab: Generate Personalized Email Content with BigQuery Continuous Queries and Gemini

Module 8 - Summary

Topics:

- Summary

Objectives:

- Summarize the key topics covered in the course.

Skills You Will Learn:

- 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.

Frequently Asked Questions

Q: What delivery options are available for BigQuery for Data Analysts?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 2-day BigQuery for Data Analysts course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the BigQuery for Data Analysts training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for BigQuery for Data Analysts?

Yes, we provide corporate training, dedicated training, and closed classes for BigQuery for Data Analysts. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: BigQuery for Data Analysts, Data Analysis, BQDA

Q: Why choose Nexus Human for BigQuery for Data Analysts?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your BigQuery for Data Analysts training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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