

# DATA WAREHOUSING W/BIGQUERY: STORAGE DESIGN, QUERY OPTIMIZATION, AND ADMINISTRATION

Course Code: 899012

Learn about the internals of BigQuery and best practices for designing, optimizing, and administering your data warehouse.

In this course, you learn about the internals of BigQuery and best practices for designing, optimizing, and administering your data warehouse. Through a combination of lectures, demos, and labs, you learn about BigQuery architecture and how to design optimal storage and schemas for data ingestion and changes. Next, you learn techniques to improve read performance, optimize queries, manage workloads, and use logging and monitoring tools. You also learn about the different pricing models. Finally, you learn various methods to secure data, automate workloads, and build machine learning models with BigQuery ML.

## What You'll Learn

- Describe BigQuery architecture fundamentals.
- Implement storage and schema design patterns to improve performance
- Use DML and schedule data transfers to ingest data.
- Apply best practices to improve read efficiency and optimize query performance.
- Manage capacity and automate workloads.
- Understand patterns versus anti-patterns to optimize queries and improve read performance.
- Use logging and monitoring tools to understand and optimize usage patterns.
- Apply security best practices to govern data and resources.
- Build and deploy several categories of machine learning models with BigQuery ML.

## Who Needs to Attend

Data analysts, data scientists, data engineers, and developers who perform work on a scale that requires advanced BigQuery internals knowledge to optimize performance

## Prerequisites

Big Data and Machine Learning Fundamentals

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VIRTUAL CLASSROOM LIVE

\$2,700 USD

3 Day

## Virtual Classroom Live Outline

- BigQuery Architecture Fundamentals
- Storage and Schema Optimizations
- Ingesting Data
- Changing Data
- Improving Read Performance
- Optimizing and Troubleshooting Queries
- Workload Management and Pricing
- Logging and Monitoring
- Security in BigQuery
- Automating Workloads
- Machine Learning in BigQuery

Oct 21 - 23, 2026 | 9:00 AM - 5:00 PM EDT

Visit us at [www.globalknowledge.com](http://www.globalknowledge.com) or call us at 1-866-716-6688.

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