

## TRAINING GOALS:

LookML not only serves as the foundation for visualization assets in Looker, but is also capable of dynamic aggregations, incrementally refreshed persistent derived tables, and more. In this course you will practice the skills to be an advanced Looker Developer through guided lectures and independent exercises using sample data.

### What you'll learn

- Customize and incrementally refresh SQL and native derived tables
- Incorporate Liquid for dynamic SQL, formatting, templated filters, and parameters in Looker
- Use extends and refinements in Looker to modularize and organize your LookML
- Troubleshoot LookML code and improve performance
- Apply Looker best practices to your LookML projects
- Manage Looker deployments using DevOps practices
- Embed Looker content into web applications

### Audience

This course is primarily intended for developers and data professionals who want to master LookML and build advanced analytics solutions in Looker.

### Products

- Looker

## CONSPECT:

- Looker Admin and LookML Fundamentals
  - Topics
    - Looker Review

- Roles and User Attributes
- Connecting to a Database
- LookML Review
- Objectives
  - Review key concepts of Looker and LookML development
  - Describe roles and user attributes in Looker
  - Explain how to connect your Looker instance to a database
- Activities
  - Lab: Starter LookML Cleanup
- Diving Deeper into Derived Tables
  - Topics
    - Understanding Derived Tables
    - Adding Persistence
    - Refreshing Incrementally
    - PDTs and Performance
  - Objectives
    - Define derived tables and advantages of native derived tables
    - Maintain derived tables in Looker
    - Describe performance implications of different PDT options
  - Activities
    - Lab: Extending LookML with PDTs and Aggregate Tabl
- Creating Dynamic LookML with Liquid
  - Topics
    - Core Liquid Concepts and Syntax
    - Custom Links, Drills, and Formatting
    - Templated Filters, Parameters and Dynamic SQL
  - Objectives
    - Core Liquid Concepts and Syntax
    - Custom Links, Drills, and Formatting
    - Templated Filters, Parameters and Dynamic SQL
  - Activities
    - Lab: Enhancing LookML Flexibility with Liquid
- Creating Modular LookML
  - Topics
    - Extensions
    - Refinements

- Manifests and Localization
- Objectives
  - Use extends and refinements in Looker to modularize and organize your LookML
  - Implement localization into your LookML models
- Activities
  - Lab: Modularize your LookML
- Testing, Debugging and DevOps
  - Topics
    - Leverage your IDE
    - Debugging and Common Errors
    - Data Tests
    - Looker and DevOps
  - Objectives
    - Utilize the Looker IDE to ease development and debugging of LookML.
    - Write data tests to ensure validity of your Looker dashboards
    - Understand DevOps best practices in Looker
  - Activities
    - Lab: Testing and debugging LookML
- Looker Best Practices
  - Topics
    - Looker Best Practices
    - Improving Performance
  - Objectives
    - Understand Looker best practices
    - Implement best practices in LookML to improve performance
  - Activities
    - Lab: Implementing LookML Best Practices
- Embedded Looker Analytics
  - Topics
    - Explore Embedded Looker Options
    - Using Private and SSO Embedding
  - Objectives
    - Explore options for embedding Looker content
    - Understand how to use private and SSO embedding

## REQUIREMENTS:

To get the most out of this course, participants are encouraged to have completed the “Developing Data Models with LookML” course or the equivalent experience in using LookML for development in Looker.

### Difficulty level



## CERTIFICATE:

The participants will obtain certificates signed by Google Cloud (course completion).

## TRAINER:

Authorized Google Cloud Trainer