






# Developing Data Models with LookML

This course empowers you to develop scalable, performant LookML (Looker Modeling Language) models that provide your business users with the standardized, ready-to-use data that they need to answer their questions. Upon completing this course, you will be able to start building and maintaining LookML models to curate and manage data in your organization's Looker instance.

 **DURATION**  
1 day

 **LEVEL**  
Intermediate

 **FORMAT**  
Instructor led

## What you'll learn

- Define LookML basic terms and building blocks
- Use the Looker Integrated Development Environment (IDE) and project version control to modify LookML projects
- Create dimensions and measures to curate data attributes used by business users
- Create and design Explores to make data accessible to business users
- Use derived tables to instantaneously create new tables
- Use caching and datagroups in Looker to speed up SQL queries



<b>Overview</b>	6 Modules · 2 Labs · 10 Classroom activities (6 demos, 2 quizzes, 2 labs)
<b>Who this course is for</b>	<ul style="list-style-type: none"><li>• Data developers who are responsible for data curation and management within their organizations.</li><li>• Data analysts interested in learning how data developers use LookML to curate and manage data in their organization's Looker instance.</li></ul>
<b>Products</b>	Looker
<b>Prerequisite</b>	To get the most out of this course, participants should have a basic understanding of SQL, Git, and the Looker business user experience. For learners with no previous experience as data explorers in Looker, it is recommended to first complete <i>Analyzing and Visualizing Data in Looker</i> .
<b>Not covered</b>	<ul style="list-style-type: none"><li>• Analyzing data in Explores</li><li>• Creating and sharing visualizations and dashboards</li><li>• Looker administrative features and functions</li></ul>

## Module 01 Introduction to Looker and LookML

<b>Topics</b>	LookML basics, Looker development environment
<b>Objectives</b>	<ul style="list-style-type: none"><li>• Define Looker and the functionality it provides for curating data</li><li>• Define LookML basic terms and building blocks</li><li>• Use the Looker Integrated Development Environment (IDE) to modify LookML projects</li></ul>
<b>Activities</b>	1 demo, 1 quiz

## Module 02 Creating Dimensions and Measures

<b>Topics</b>	Dimensions, measures
<b>Objectives</b>	Create dimensions and measures to curate data attributes used by business users
<b>Activities</b>	2 demos, 1 lab

## Module 03 Project Version Control

<b>Topics</b>	Git within Looker, project version control
<b>Objectives</b>	Implement version control with Git to manage and track changes in LookML projects



Activities –

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## Module 04 Model Files

Topics SQL within Looker, Explores, joins, symmetric aggregations, filters

- Objectives
- Explain how Looker utilizes SQL on the back end to translate user requests to query results
  - Create and design Explores to make data accessible to business users
  - Use joins to establish relationships between data tables
  - Leverage symmetric aggregation to ensure the accuracy of aggregated metrics
  - Implement filters to preselect data provided to end users

Activities 1 quiz

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## Module 05 Derived Tables

Topics Derived tables, best practices

- Objectives
- Define the two types of derived tables in Looker
  - Create ephemeral and persistent derived tables
  - List best practices for creating derived tables

Activities 2 demos, 1 lab

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## Module 06 Caching and Datagroups

Topics Caching, datagroups

- Objectives
- Explain how Looker uses caching to speed up SQL queries
  - Use datagroups to manage caching policies in Looker

Activities 1 demo

