

Google Cloud Big Data and Machine Learning Fundamentals

Course reading list

M.0: Course Introduction

- [The Google Cloud Training website](#)
- [Learning path: Data Engineering and Smart Analytics](#)
- [Learning path: Machine Learning and AI](#)

M.1: Big Data and Machine Learning on Google Cloud

- Google Cloud architecture
 - [Compute Engine](#)
 - [Cloud TPU](#)
 - [Tensor Processing Unit: designed for fast and affordable AI](#)
 - [Cloud Storage](#)
 - [Google Cloud pricing](#)
 - [The Google Cloud blog](#)
- [Google cloud products](#)
 - [The Google Cloud product description cheat sheet](#)
 - [AI and Machine Learning](#)
 - [Data Analytics](#)
 - [Databases](#)
- [Google cloud solutions](#)
 - [Artificial Intelligence](#)
 - [Smart Analytics solutions](#)
- [Google Photos](#)
 - [Google Pixel 2 | Motorcycle video stabilization side-by-side](#)
 - [Fused Video Stabilization on the Pixel 2 and Pixel 2 XL](#)
- SQL
 - [Introduction to SQL in BigQuery](#)
 - [SQL syntax](#)
 - [Qwiklabs: BigQuery Basics for Data Analysts](#)

M.2: Data Engineering with Streaming Data

- [Pub/Sub documentation](#)
- [Dataflow documentation](#), [Dataflow templates](#)
- [Data Studio documentation](#), [Data Studio templates](#)
- [Looker user guide](#), [Looker documentation](#)

M.3: Big Data with BigQuery

- [BigQuery Introduction](#), [BigQuery documentation](#)
- [Introduction to loading data in BigQuery](#)
- [Blog: Using Google Sheets with BigQuery](#)
- [BigQuery ML Standard SQL Syntax Reference](#)
- [BigQuery ML tutorials](#)

M.4: Machine Learning Options on Google Cloud

- [Learning path: Machine Learning on Google Cloud](#)
- [Benefits and key features of Vertex AI](#)
- [Best practices for implementing machine learning on Google Cloud](#)
- [Google's AutoML: Cutting Through the Hype](#)
- [Overview: Custom containers](#)
- [Overview: Deep Learning containers](#)

M.5: The Machine Learning Workflow with Vertex AI

- [Vertex AI introduction](#), [Vertex AI documentation](#), [Vertex AI features](#)
- [AutoML beginner's guide](#), [AutoML model types](#)
- [Training an AutoML model using the Cloud Console](#)
- [Vertex AI: Preparing data](#)
- [Classification: Precision and Recall](#)
- [MLOps: Continuous delivery and automation pipelines in machine learning](#)