



Google Developers Student Clubs

نادي جوجل للطلبة المطورين

Princess Nourah Bint Abdul Rahman University

# Qwiklabs Plan

2023/2024

## Overview & Purpose

Qwiklabs is an online learning platform that provides lab learning environments that help developers and IT professionals get hands-on experience working with leading cloud platforms and software.

Qwiklabs aims to empower learners with practical skills that can be immediately applied in their professional careers.

## Objectives

1. Enhance Learning Opportunities.
2. Enhance Skill Development.
3. Promote Practical Application.
4. Enhance Collaboration and Networking.

## Policies

All Members must Participate As a Group, The minimum for each group is between 8 to 12.

The Estimate Duration for the Paths Between 30 to 40 Hours By the end of Each Path, Each Group must do a Report and one thing from this

1. Workshop
2. Talks
3. Project

## Courses

❖ From 14 Jan to 31 Jan 2024

Name of Path	Name of Courses	Estimate Duration For Course	Estimate Duration For Path
Google Cloud Computing Foundations	Google Cloud Computing Foundations: Cloud Computing Fundamentals	5 Hours	15 Days, 2 Hour per day
	Google Cloud Computing Foundations: Infrastructure in Google Cloud	6 Hours	
	Google Cloud Computing Foundations: Data, ML, and AI in Google Cloud	6 Hours	
	Create and Manage Cloud Resources (Lab)	3 Hours 45 Minutes	
	Perform Foundational Infrastructure Tasks in Google Cloud (Lab)	3 Hours	
	Perform Foundational Data, ML, and AI Tasks in Google Cloud (Lab)	5 Hours	
	Network Engineer Learning Path	3 Hours	
	Google Cloud	5 Hours	

Network Engineer Learning Path	Fundamentals: Core Infrastructure		16 Days, 2 Hour per day
	Networking in Google Cloud: Defining and Implementing Networks	5 Hours	
	Networking in Google Cloud: Hybrid Connectivity and Network Management	4 Hours	
	Create and Manage Cloud Resources (Lab)	3 Hours	
	Configure Google Kubernetes Engine Networking (Lab)	5 Hours	
	Build and Secure Networks in Google Cloud (Lab)	4 Hours	
	Network Performance and Optimization (Lab)	2 Hours	
	Google Cloud Fundamentals: Core Infrastructure	5 Hours	
	Enterprise Database Migration	8 Hours	
	Migrate MySQL data to Cloud SQL using Database Migration Service	4 Hours	

Database Engineer Learning Path	(Lab)		17 Days, 2 Hour per day
	Manage PostgreSQL Databases on Cloud SQL (Lab)	4 Hours	
	Manage Bigtable on Google Cloud (Lab)	5 Hours	
	Create and Manage AlloyDB Databases (Lab)	7 Hours	
API Developer Learning Path	Google Cloud Fundamentals: Core Infrastructure	5 Hours	17 Days, 2 Hour per day
	API Design and Fundamentals of Google Cloud's Apigee API Platform	5 Hours	
	API Security on Google Cloud's Apigee API Platform	6 Hours	
	API Development on Google Cloud's Apigee API Platform	8 Hours	
	Develop and Secure APIs with Apigee X (Lab)	5 Hours	
	Deploy and Manage Apigee X (Lab)	5 Hours	

❖ From 1 Feb to 29 Feb 2024

Name of Path	Name of Courses	Estimate Duration For Course	Estimate Duration For Path
Machine Learning Engineer Learning Path	Introduction to AI and Machine Learning on Google Cloud	10 Hours	29 Days, 2 Hour per day
	Launching into Machine Learning	10 Hours	
	TensorFlow on Google Cloud	8 Hours	
	Feature Engineering	8 Hours	
	Natural Language Processing on Google Cloud	6 Hours	
	Machine Learning Operations (MLOps): Getting Started	6 Hours	
	Machine Learning Operations (MLOps) with Vertex AI: Manage Features	6 Hours	
	Build and Deploy Machine Learning Solutions on Vertex AI (Lab)	5 Hours	
	Introduction to Image Generation	6 Hours	
	Attention Mechanism	6 Hours	

Generative AI for Developers Learning Path	Encoder-Decoder Architecture	6 Hours	20 Days, 2 Hour per day
	Transformer Models and BERT Model	6 Hours	
	Create Image Captioning Models	6 Hours	
	Introduction to Generative AI Studio	6 Hours	
	Generative AI Explorer - Vertex AI (Lab)	4 Hours	
Database Engineer Learning Path	Enterprise Database Migration	15 Hours	13 Days, 2 Hour per day
	Migrate MySQL data to Cloud SQL using Database Migration Service (Lab)	6 Hours	
	Manage PostgreSQL Databases on Cloud SQL (Lab)	4 Hours	
Data Engineer Learning Path	Preparing for your Professional Data Engineer Journey	4 Hours	21 Days, 2 Hour per day
	Google Cloud Big Data and Machine Learning Fundamentals	4 Hours	
	Modernizing Data Lakes and Data Warehouses with Google Cloud	9 Hours	
	Building Batch	10 Hours	

	Data Pipelines on Google Cloud		
	Serverless Data Processing with Dataflow: Foundations	6 Hours	
	Build and Optimize Data Warehouses with BigQuery (Lab)	4 Hours	
	Engineer Data in Google Cloud (Lab)	4 Hours	

❖ From 1 Mar to 31 Mar 2024

Name of Path	Name of Courses	Estimate Duration For Course	Estimate Duration For Path
Security Engineer Learning Path	Networking in Google Cloud: Defining and Implementing Networks	5 Hours	22 Days, 2 Hour per day
	Networking in Google Cloud: Hybrid Connectivity and Network Management	5 Hours	
	Managing Security in Google Cloud	9 Hours	
	Security Best Practices in Google Cloud	9 Hours	
	Build and Secure Networks in	5 Hours	



	Google Cloud		
	Ensure Access & Identity in Google Cloud (Lab)	4 Hours	
	Google Kubernetes Engine Best Practices: Security (Lab)	3 Hours	
	Securing your Network with Cloud Armor (Lab)	3 Hours	
Data Analyst Learning Path	Introduction to Data Analytics on Google Cloud	5 Hours	8 Days, 2 Hour per day
	Analyzing and Visualizing Data in Looker	3 Hours	
	Exploring Data with Looker (Lab)	4 Hours	
	Data Catalog Fundamentals (Lab)	3 Hours	
AppSheet Developer Learning Path	Building No-Code Apps with AppSheet: Foundations	9 Hours	16 Days, 2 Hour per day
	Building No-Code Apps with AppSheet: Implementation	15 Hours	
	Building No-Code Apps with AppSheet: Automation	6 Hours	
	Building No-Code Apps with	2 Hours	

	AppSheet: Challenge (Lab)		
Google Cloud Infrastructure for AWS professionals	Google Cloud IAM and Networking for AWS Professionals	6 Hours	16 Days, 2 Hour per day
	Google Cloud Compute and Scalability for AWS Professionals	6 Hours	
	Google Cloud Storage and Containers for AWS Professionals	9 Hours	
	Deploy and Monitor in Google Cloud for AWS Professionals	6 Hours	
	Build Google Cloud Infrastructure for AWS Professionals	4 Hours	

❖ From 1 Apr to 30 Apr 2024

Name of Path	Name of Courses	Estimate Duration For Course	Estimate Duration For Path
Workspace End User Learning Path (Optional)	Google Docs	6 Hours	12 Days, 2 Hour per day
	Google Sheets	6 Hours	
	Google Slides	6 Hours	
	Google Sheets - Advanced Topics	6 Hours	

➤ Projects

We have created this [repo](#) just for improving your Skills in any kind of programming. We are creating this [repo](#) So that many of you can add your files over here.

There are no guidelines or intersections for your project, you can do what you want.

\* If you Don't know how to use GitHub, This a course from [Udacity](#).

Good Luck ❤️