

Google Cloud Digital Leader

About Course

Sunshine Learning & Technology's, helps you in gaining foundational literacy in Cloud & Digital Transformation. A Google Cloud Digital Leader can distinguish and evaluate the various capabilities of Google Cloud core products and services and how they can be used to achieve desired business goals. A Cloud Digital Leader is well-versed in basic cloud concepts and can demonstrate a broad application of cloud computing knowledge in a variety of applications.

The Cloud Digital Leader exam is job-role independent. The exam assesses the knowledge and skills of individuals who want or are required to understand the purpose and application of Google Cloud products.

Google Cloud Digital Leader Training Curriculum:

Getting Started

Topics:

- 🔗 Introduction
- 🔗 Course Overview
- 🔗 Introduction to Cloud & GCP – Google Cloud Platform
- 🔗 Creating GCP – Google Cloud Platform – Account

Regions and Zones in GCP – Google Cloud Platform

Topics:

- 🔗 Why do we need Regions and Zones?
- 🔗 Understanding Regions and Zones in GCP.

Getting start with Compute Engine, Instance Group & Load Balancing

Topics:

- 🔗 Section Introduction – Getting started with Compute Engine & Instance Groups.
- 🔗 Getting started with Google Compute Engine - GCE
- 🔗 Creating your first Virtual Machine in GCP
- 🔗 Commands executed in next steps
- 🔗 Installing HTTP Webserver on Google Compute Engine Virtual Machine

- 🔗 Exploring Compute Engine VM IP Addresses in Google Cloud Platform
- 🔗 Start up script for next step!
- 🔗 Simplifying Web Server setup with Compute Engine Startup Script
- 🔗 Simplifying VM creation in Google Cloud Platform - Instance Templates
- 🔗 Reducing Launch Time with a Custom Image
- 🔗 Understanding Sustained Use Discounts in GCP - Google Cloud Platform
- 🔗 Understanding Committed Use Discounts in GCP - Google Cloud Platform
- 🔗 Saving Costs with Preemptible VMs
- 🔗 Creating VMs on Dedicated Host with Sole Tenant Nodes
- 🔗 Understanding Custom Machine Types
- 🔗 Quick Review - Google Compute Engine
- 🔗 Managing multiple VMs using Instance Groups in GCP
- 🔗 Creating Managed Instances Groups in Google Cloud
- 🔗 Playing with Managed Instances Groups in Google Cloud
- 🔗 0 - Load Balancing in Google Cloud Platform - Cloud Load Balancing
- 🔗 Creating a Load Balancer in Google Cloud with Cloud Load Balancing
- 🔗 Exploring Load Balancer in GCP - Google Cloud Platform
- 🔗 Optimize Your Cloud Usage

Managed Services – IAAS, PAAS and SAAS in Google Cloud Platform

Topics:

- 🔗 Section Introduction - Managed Services - IAAS, PAAS and SAAS in GCP
- 🔗 What are Managed Services?
- 🔗 Understanding IAAS and PAAS
- 🔗 Understanding Evolution to Containers and Container Orchestration
- 🔗 Understanding Serverless
- 🔗 Understanding SaaS (Software as a Service)
- 🔗 Understanding Shared Responsibility Model
- 🔗 Exploring Google Cloud Platform Google Compute Services

Exploring Google Cloud Platform GCP Compute Services.

Topics:

- 🔗 Section Introduction - Exploring Google Cloud Platform GCP Compute Services
- 🔗 Getting Started with Google App Engine (GAE)
- 🔗 Understanding App Engine Environments - Standard and Flexible
- 🔗 Playing with App Engine - GAE
- 🔗 Exploring App Engine in GCP - App, Services and Versions
- 🔗 IaaS or PaaS or SaaS – Service Categories – Scenarios
- 🔗 Getting Started with Google Kubernetes Engine GKE
- 🔗 Kubernetes Journey - Creating a GKE Cluster
- 🔗 Commands executed in next steps

- 🔗 Kubernetes Journey - Create a Deployment and a Service
- 🔗 Kubernetes Journey - Scaling Deployments and Resizing Node Pools
- 🔗 Kubernetes Journey - Autoscaling
- 🔗 Delete GKE Service, Deployment and Cluster
- 🔗 Getting Started with Google Cloud Functions
- 🔗 Creating your first Google Cloud - Cloud Function
- 🔗 Getting Started with Google Cloud Run and Anthos
- 🔗 Scenarios - GCP Compute Services

Block, File and Object Storage in GCP

Topics:

- 🔗 Section Introduction - Block, File and Object Storage in GCP
- 🔗 Exploring Block and File Storage in GCP
- 🔗 Playing with Object Storage in GCP - Cloud Storage
- 🔗 Exploring Cloud Storage in GCP
- 🔗 Understanding Cloud Storage - Storage Classes
- 🔗 Understanding Cloud Storage - Lifecycle Management
- 🔗 Transferring data to cloud - Online, Transfer Service and Transfer
- 🔗 Launch Configurations
- 🔗 Comparison of Classic, Network and Application Load Balancer
- 🔗 Auto-Scaling
- 🔗 Components of Auto-Scaling
- 🔗 Lifecycle of Auto-Scaling
- 🔗 Auto-Scaling policy
- 🔗 Working of Route 53
- 🔗 Various Routing Policies

Databases in Google Cloud

Topics:

- 🔗 Section Introduction - Databases in Google Cloud
- 🔗 Understanding Database Fundamentals – Choosing Databases
- 🔗 OLTP Relational Databases in Google Cloud - Cloud SQL & Cloud Spanner
- 🔗 Demo - Playing with Cloud SQL
- 🔗 Demo - Playing with Cloud SQL – 2
- 🔗 Demo - Playing with Cloud Spanner
- 🔗 OLAP Relational Database in Google Cloud - BigQuery
- 🔗 NoSQL Databases in Google Cloud - Firestore, Datastore and BigTable
- 🔗 Demo - Playing with Firestore
- 🔗 In memory Database in Google Cloud - Memorystore
- 🔗 Databases in Google Cloud Platform - A Quick Review
- 🔗 Databases in Google Cloud Platform – Scenarios

Getting started with Cloud IAM

Topics:

- 🔗 Section Introduction - Getting started with Cloud IAM
- 🔗 Getting started with Cloud IAM
- 🔗 Exploring Cloud IAM with an Example
- 🔗 Exploring Cloud IAM - Roles
- 🔗 Demo - Playing with IAM
- 🔗 Getting Started with Service Accounts
- 🔗 Demo - Playing with Service Accounts

Organizing Google Cloud Resources and Setting up Hybrid Cloud

Topics:

- 🔗 Section Introduction - Organizing Google Cloud Resources
- 🔗 Organizing Google Cloud Resources - Projects, Folders and Organization
- 🔗 Exploring Billing Accounts
- 🔗 Understanding IAM Best Practices
- 🔗 Cloud Computing Public vs Private vs Hybrid Clouds
- 🔗 Implementing Hybrid Cloud with Cloud VPN and Cloud Interconnect
- 🔗 Understanding User Identity Management in GCP
- 🔗 Understanding Organization Policy Service
- 🔗 Exploring IAM Policy at multiple levels - Resourcing Hierarchy

More Virtual Machines in Google Cloud

Topics:

- 🔗 Going Baremetal in Google Cloud
- 🔗 Getting Started with Google Cloud VMware Engine
- 🔗 Getting Started with Migrate for Compute Engine
- 🔗 Migrate for Anthos and GKE

Getting Started with DevOps

Topics:

- 🔗 What is DevOps
- 🔗 Exploring DevOps Practices, Continuous Integration, Deployment.
- 🔗 DevOps in Google Cloud - Continuous Integration, Deployment & Delivery
- 🔗 Exploring DevOps Practices - Infrastructure as Code
- 🔗 Exploring DevOps - Operations in Google Cloud

Building Loosely Coupled Applications with Cloud Pub Sub

Topics:

- 🔗 Understand Need for Asynchronous Communication
- 🔗 Getting started with Cloud Pub Sub
- 🔗 Exploring Cloud Pub Sub - Publishing and Consuming a Message
- 🔗 Demo - Playing with Cloud Pub Sub
- 🔗 Getting Started with Cloud Dataflow

Google Cloud Architecture for Cloud Digital Leader

Topics:

- 🔗 Section Introduction - Google Cloud Architecture for Cloud Digital Leader
- 🔗 Architecture - Loose Coupling with Pub Sub
- 🔗 Getting Started with Cloud Dataproc
- 🔗 Architecture 1 - Big Data Flow - Batch Ingest
- 🔗 Architecture 2 - Streaming Data
- 🔗 Architecture 3 - IOT
- 🔗 Exploring API management - Apigee, Endpoints, API Gateway
- 🔗 Machine Learning - 10,000 Feet Overview
- 🔗 ML in Google Cloud - Pre Trained Models
- 🔗 ML in Google Cloud - Custom Models
- 🔗 Faster ML in Google Cloud - TPUs
- 🔗 Machine Learning Scenarios
- 🔗 Getting Started with Firebase
- 🔗 Exploring Container Registry and Artifact Registry
- 🔗 Monolith to Microservices - Application Modernization
- 🔗 Important Security Related Services in Google Cloud

Google Cloud Platform – Support, SLA and Compliance

Topics:

- 🔗 Section Introduction - GCP - Support, SLA and Compliance
- 🔗 Google Cloud - Service Level Agreement (SLA)
- 🔗 Google Cloud - Compliance
- 🔗 Legacy Support Options - Role Based & Enterprise
- 🔗 Support Plans in Google Cloud
- 🔗 Cloud Billing vs Technical Support

Cost Management in Google Cloud Platform - GCP

Topics:

- 🔗 Section Introduction - Cost Management in Google Cloud Platform
- 🔗 Total Cost of Ownership (TCO)
- 🔗 Consumption based vs Fixed price Pricing Models
- 🔗 Expenditure Models/ CapEx vs OpEx
- 🔗 How is Cost Decided?
- 🔗 Exploring Google Cloud Pricing Calculator
- 🔗 GCP Cost Management
- 🔗 Managing Costs - Best Practices

Quick Review - Google Cloud – Cloud Digital Leader Certification

Topics:

- 🔗 Section Introduction - Quick Review - Google Cloud
- 🔗 Review - Basic Compute Services in Google Cloud
- 🔗 Review - Managed Compute Services in Google Cloud
- 🔗 Review - Storage Services in Google Cloud
- 🔗 Review - Databases in Google Cloud
- 🔗 Review - Streams, Analytics, Big Data Services in Google Cloud
- 🔗 Review - Migration to Google Cloud - Google Cloud Services

Get Ready – Google Cloud - Cloud Digital Leader Certification

Topics:

- 🔗 Get Ready - Google Cloud - Cloud Digital Leader Certification
- 🔗 My Recommendations - Google Cloud - Cloud Digital Leader Certification
- 🔗 Congratulations - Google Cloud - Cloud Digital Leader Certification

Hands On:-

There will be separate Hands-On on each topic.