**Course- 1**

**Introducing Google Cloud**

1] Cloud Computing Overview - https://youtu.be/ph5hjgOAf40

2]IaaS and PaaS - <https://youtu.be/KHHZTSzlOWg>

3]The Google Cloud Network - <https://youtu.be/bJCtk_Ald7s>

4]Environmental impact - <https://youtu.be/yOoOz6umhz0>

5]Security - <https://youtu.be/BggWZl8qTzk>

6]Open source ecosystems - <https://youtu.be/1Ciw8DLhKfM>

7]Pricing and Billing - <https://youtu.be/Iu-oiQnk79E>

**Resources and Access in the Cloud**

1]Google Cloud resources – https://youtu.be/zdxQZh2iOFE

2]Identity and Access Management (IAM) – https://youtu.be/L-vkXL2jEvE

3]Services accounts – https://youtu.be/1MTQnROOWS0

4] Cloud Identity – https://youtu.be/EZccX9nFaiI

5] Interacting with Google – <https://youtu.be/D9P4mA59p78>

**Virtual Machines and Networks in the Cloud**

1]Virtual Private cloud networking - https://youtu.be/JQXe93Aouig

2]Compute Engine - https://youtu.be/Oxwz5HbYUF8

3]Scaling virtual machines - https://youtu.be/YQK8u563me4

4]Important VPC compatibilities - https://youtu.be/UtNlJbm8s2Q

5]Cloud Load Balancing - https://youtu.be/\_bNIDMXL5uc

6] Cloud DNS and Cloud CDN - https://youtu.be/Jc71ZC9Euj0

7]Connecting networks to Google VPC - <https://youtu.be/J-BKPvXsXqU>

**Storage in the Cloud**

1]Google Cloud storage options – https://youtu.be/y8Cs3ZQehIU

2]Cloud Storage – https://youtu.be/pLMkOa4FbwI

3]Cloud Storage : Storage classes and data transfer – https://youtu.be/B5B9O-zIO4g

4]Cloud SQL – https://youtu.be/X8LHiTH4zMY

5]Cloud Spanner – https://youtu.be/P7BZZPHhy3w

6]Firestore – https://youtu.be/ULM1praCJbU

7]Cloud Bigtable – https://youtu.be/M8Jlby8O5Zw

8]Comparing storage options - <https://youtu.be/_qsDkpyS3Mw>

**Containers in the Cloud**

1]Introduction to containers - https://youtu.be/\_l2L2bWkgJE

2]Kubernetes - https://youtu.be/SxzidfvMVqI

3]Google Kubernetes Engine - https://youtu.be/K5Wx-0nbRbY

4]Hybrid and Multi-cloud - https://youtu.be/q9BYJgA6FeU

5]Anthos - <https://youtu.be/ZVZtWMNqUtk>

**Applications in the Cloud**

1]App Engine - https://youtu.be/vnukP-TChyY

2]App Engine Environments - https://youtu.be/KoQgDdAB9CM

3] Google Cloud API management tools - https://youtu.be/t3763eBQ5yI

4]Cloud Run - https://youtu.be/Cwy3EjJWb3E

**Developing and Deploying in the Cloud**

1]Development in the cloud - https://youtu.be/NUAJ\_YoCrLI

2]Deployment : Infrastructure as Code - https://youtu.be/6T-TAfwy8as

**Logging and Monitoring in the Cloud**

1]The Importance of monitoring - https://youtu.be/hYfKzvIGIaU

2]Measuring performance and reliability - https://youtu.be/X2jchXUmDEE

3]Understanding SLIs, SLOs, and SLAs - https://youtu.be/h5oR21rT1F8

4]Integrated observability tools - https://youtu.be/lxyYXa9kcNg

5]Monitoring tools - https://youtu.be/rbr6Q1ddSfU

6]Logging tools - https://youtu.be/q0pjkpNT5Zk

7]Error reporting and debugging tools - <https://youtu.be/pzxbEBBYLwQ>

**Course - 2**

Essential Google Cloud Infrastructure: Foundation

**Introduction**

1]Course Introduction - https://youtu.be/G1Onqg8Oybs

**Interacting with Google Cloud**

1]Module Overview – https://youtu.be/iL\_Iel-Vryc

2]Using Google Cloud – https://youtu.be/Zc\_iVCwQvDc

3]Lab Intro: Working with the Google Cloud Console and Cloud Shell – https://youtu.be/54x8MTrNo-8

4]Lab Review: Working with the Google Cloud Console and Cloud Shell – https://youtu.be/o0rm0MXcQzo

5]Lab Intro: Infrastructure Preview – https://youtu.be/OHqI-dggoPs

6]Lab Review: Infrastructure Preview – https://youtu.be/HVc4x5twvag

7]Demo: Projects – https://youtu.be/0Dz0HUw7hcQ

8]Module Review - <https://youtu.be/h5pJ4L38tj4>

**Virtual Networks**

1]Module Overview - https://youtu.be/FVj2YYQnkrM

2]Virtual Private Cloud - https://youtu.be/KTDHvLFvwrw

3]Projects, networks, and subnetworks - https://youtu.be/0x2klVtUA9k

4]Demo: Expand a Subnet - https://youtu.be/-PmauCDjzyA

5]IP addresses - https://youtu.be/H1wYg3GPvIo

6]Demo : Internal and External IP - https://youtu.be/mVoF\_58D-6k

7]Mapping IP addresses - https://youtu.be/g5IkY1hqQNw

8]Routes and firewall rules – https://youtu.be/3TYssEfEFlw

9]Pricing – https://youtu.be/gsOUudWhOpc

10]Lab Intro : VPC Networking – https://youtu.be/EtZBPjb-cD4

11]Lab Review: VPC Networking – https://youtu.be/UjlYPCDJM30

12]Common network designs - https://youtu.be/7RgTB7NAAQw

13]Lab Intro: Implement Private Google Access and Cloud NAT – https://youtu.be/9OgvlhCLCvY

14]Lab Review: Implement Private Google Access and Cloud NAT – https://youtu.be/RLRZ5OEO26Q

15]Module Review - <https://youtu.be/1lqmGhTghtI>

**Virtual Machines**

1]Module Overview - https://youtu.be/EEj4pUZ8xC0

2]Compute Engine - https://youtu.be/BRTaPLRJHF0

3]Demo : Create a VM - https://youtu.be/7dLQD1L8Sfc

4]VM access and lifecycle - https://youtu.be/WWYzk6p05Fg

5]Lab Intro : Creating Virtual Machines - https://youtu.be/jPWqVFk\_Ces

6]Lab Review : Creating Virtual Machines - https://youtu.be/gTZ\_zCrUWkc

7]Compute options - https://youtu.be/aec7H8QE-7Y

8]Compute pricing - https://youtu.be/uNy8wfme34E

9]Special compute configurations - https://youtu.be/-bboz9sc0WA

10]Images – https://youtu.be/MEOrH8zPesU

11]Disk options - https://youtu.be/q-FIYArz1qo

12]Common Compute Engine actions - https://youtu.be/04Q4DLH-lM4

13]Lab Intro: Working with virtual Machines - https://youtu.be/xfZee9KqgVI

14]Lab Review: Working with virtual Machines – https://youtu.be/7c\_3m5t53dA

15]Module Review – https://youtu.be/ABJumQbrFZo

16]Course Review - <https://youtu.be/mDWvxWO9LFA>

**Course - 3**

**Preparing for the Associate Cloud Engineer**

**Introduction**

1]Module Overview - https://youtu.be/vM0TPHj20lo

2]Introduction to the Associate Cloud Engineer - https://youtu.be/ooWm-UbrjE0

3]Certification value and benefits - https://youtu.be/J8TMotckDMY

4]Certification process - https://youtu.be/\_F3Fozfby4A

5]Creating your study plan - <https://youtu.be/-ZfGPJYL4_4>

**Setting Up a Cloud Solution Environment**

1]Module Overview - https://youtu.be/M1-EDylyp6E

2]Settings up Cymbal Superstore’s cloud environment - https://youtu.be/DQLlSv2N1co

3]Introduction: Diagnostics questions - https://youtu.be/NvuPHUeseA8

4]Your study plan - <https://youtu.be/I7mLkvZou1I>

**Planning and Configuring a Cloud Solution**

1]Module Overview - https://youtu.be/whwIokKNQv4

2]Selecting resources for Cymbal Superstore’s cloud solutions - https://youtu.be/3wlxjZZPPLc

3]Introduction: Diagnostic questions - https://youtu.be/1s3NsNRPBlo

4]Your study plan - <https://youtu.be/jANW1Z8LfLc>

**Deploying and Implementing a Cloud Solution**

1]Module Overview - https://youtu.be/Au87kXvGITE

2]Deploying and implementing Cymbal Superstore’s cloud recommended solutions - https://youtu.be/oASXKSCm21k

3]Introduction: Diagnostic questions - https://youtu.be/e3NHfwt9Fvw

4]Your study plan - <https://youtu.be/i3CXrp7s5Vw>

**Ensuring Successful Operation of a Cloud Solution**

1]Module Overview - https://youtu.be/adkBMRNqY\_0

2]Managing Cymbal Superstore’s Cloud solutions - https://youtu.be/oQA-0SvuHWA

3]Introduction: Diagnostic questions - https://youtu.be/xoeyn5BNNSQ

4]Your Study plan - https://youtu.be/0fyZ1UJ5QM4

**Configuring Access and Security**

1]Module Overview - https://youtu.be/gxtUfRySylo

2]Managing access for Cymbal Superstore’s cloud solutions - https://youtu.be/xh7Q3q3S-lI

3]Introduction: Diagnostic questions - https://youtu.be/Qccb7AcOx58

4]Your study plan - <https://youtu.be/TLTxYKTTx9U>

**Course-4**

**Elastic core cloud infrastructure: Core Services**

**Introduction**

1.Course Introduction - <https://youtu.be/oB8Iro1j8nQ>

**Identity and Access Management (IAM)**

1.Module Overview - https://youtu.be/mmtzocepgTU

2.Identity and Access Management - https://youtu.be/qiePcrJrTg0

3.Organization - https://youtu.be/NvAA0-IzgMc

4.Roles - https://youtu.be/UzmmDv1C9OQ

5.Demo : Custom Roles - https://youtu.be/TuB5UotB3RY

6.Members - https://youtu.be/eMP570FaP3A

7.Service Accounts - https://youtu.be/J2AQR4MMVHY

8.IAM Best Practices - https://youtu.be/DeiceYCDSzg

9.Lab Intro: Exploring IAM - https://youtu.be/3\_UTSXFX-CM

10.Lab Review : Exploring IAM - https://youtu.be/DjXuPF\_dkS4

11.Module Review - <https://youtu.be/Cq4bPJ5HuMY>

**Storage and Database Services**

1.Module Overview - https://youtu.be/vzV1KQVZuxg

2.Cloud Storage - https://youtu.be/uRdOIgPk8pA

3.Cloud Storage Features - https://youtu.be/N2nh65pPW20

4.Choosing a storage class - https://youtu.be/wIqr\_w4My14

5.Filestore - https://youtu.be/q\_k7TPP4e80

6.Lab Intro : Cloud Storage - https://youtu.be/iaPyYBDZVAs

7.Lab Review : Cloud Storage - https://youtu.be/IyLUYkB4stI

8.Cloud SQL - https://youtu.be/v1p18WZnLt8

9.Lab Intro : Cloud SQL - https://youtu.be/lmsEIDajtBc

10.Lab Review : Cloud SQL – https://youtu.be/POkBsXPfWWY

11.Cloud Spanner - https://youtu.be/OvYVxi2z0OE

12.Firestore - https://youtu.be/\_dCxihXOjkI

13.Cloud Bigtable - https://youtu.be/XQiKA9jAD3c

14.Memorystore - https://youtu.be/ekgQsYDX3c4

15.Module Review - <https://youtu.be/B_s_vB1Pjao>

**Resource Management**

1.Module Overview - https://youtu.be/RarWueVqv1g

2.Resource Manager - https://youtu.be/-qzuimZJ6hw

3.Quotas - https://youtu.be/D8A-x\_Mv7f4

4.Labels - https://youtu.be/ioB9eowIb1o

5.Billing - https://youtu.be/S3KC9FIYxCY

6.Demo : Billing Administration - https://youtu.be/xBxQF2KhLpE

7.Lab Intro : Examingin Billing Data with BigQuery - https://youtu.be/HH0akDDsx6w

8.Lab Review : Examingin Billing Data with BigQuery - https://youtu.be/UrbL\_Bimk7s

9.Module Review - <https://youtu.be/mtpwMtPjhLQ>

**Resource Monitoring**

1.Module Overview - https://youtu.be/ZrBgzdPyyPI

2.Stackdriver Overview - https://youtu.be/XQoVwLkYqIM

3.Monitoring - https://youtu.be/Y90\_GV1NuAk

4.Lab Intro : Resource Monitoring - https://youtu.be/MlSWXvv7mQ4

5.Lab Review : Resource Monitoring - https://youtu.be/\_y4Sd8DkH9E

6.Logging - https://youtu.be/Q9hrrq3pJbE

7.Error Reporting - https://youtu.be/ctze4xzHwxc

8.Tracing - https://youtu.be/7D1vAzBQmOY

9.Profiling – https://youtu.be/fj\_0U3OhJUk

10.Module Review - https://youtu.be/CRchnVTUKQk

11. Course Review - <https://youtu.be/czS0s0ebvxw>

**Course - 5**

**Elastic Infrastructure : Scaling and Automation**

**Introduction**

1.Course - <https://youtu.be/G1Onqg8Oybs>

**Interconnecting Networks**

1.Module overview - https://youtu.be/Q0u6bAOOrck

2.Cloud VPN - https://youtu.be/sbqFPW9kIgw

3.Lab Intro: Configuring Google Cloud HA VPN - https://youtu.be/pou3FC-2Vc8

4.Cloud Interconnect and Peering - https://youtu.be/Zw4RL1ftZUc

5.Cloud Interconnect - https://youtu.be/SVKAmn5Pnws

6.Peering - https://youtu.be/dN1vbXinNaY

7.Choosing a connection - https://youtu.be/ZAr03xV\_5FM

8.Shared VPC and VPC Peering - https://youtu.be/6\_E3Y5ZyJMw

9.Module Review - <https://youtu.be/T2WFJmoWSV0>

**Load Balancing and Autoscaling**

1.Module Overview - https://youtu.be/O7idh9\_zdoA

2.Managed instance groups - https://youtu.be/rpd4M3fDL8E

3.Autoscaling and health checks - https://youtu.be/Zl0ShVKS0Zk

4.Overview of HTTP(S) load balancing - https://youtu.be/ai6vf9gdhCs

5.Example : HTTP load balancer - https://youtu.be/vTSJ1UpNN6A

6.HTTP(S) load balancing - https://youtu.be/F-BiJWsm5a8

7.Lab Intro: Configuring an HTTP Load Balancer with Autoscaling - https://youtu.be/hdNuX4tHrO0

8.Lab Review: Configuring an HTTP Load Balancer with Autoscaling - https://youtu.be/WojfW6KZUpw

9.Cloud CDN - https://youtu.be/scJsKfGmspA

10.SSL proxy load balancing – https://youtu.be/HTkMB0A7gXY

11.TCP proxy load balancing – https://youtu.be/ZgTf-WdGYwM

12.Network load balancing – https://youtu.be/Te\_E\_gEz14g

13.Internal load balancing – https://youtu.be/AEMOqeOboMQ

14.Lab Intro: Configuring an internal Load Balancer – https://youtu.be/ShUy-M6osWE

15.Lab Review: Configuring an internal Load Balancer – https://youtu.be/6YHAd4YakL0

16.Choosing a load balancer – https://youtu.be/J1QLvtsZy90

17.Module Review - <https://youtu.be/C1TE7ybhgUY>

**Infrastructure Automation**

1.Module Overview - https://youtu.be/eGvJtazQ3fo

2.Terraform - https://youtu.be/LMpAptdT1yQ

3.Lab Intro: Automating the Infrastructure of Networks Using Terraform - https://youtu.be/nJOQ15vW8i0

4.Lab Review: Automating the Infrastructure of Networks Using Terraform - https://youtu.be/rvl5RC9JOHo

5.Google Cloud Marketplace - https://youtu.be/sAm9koV3mHA

6.Demo:Launch Infrastructure Solutions on Google Cloud Marketplace - https://youtu.be/eYELOYvQad8

7.Module Review - <https://youtu.be/7VBHokOQUNo>

**Managed Services**

1.Module Overview - https://youtu.be/hc7Cpb0rgOY

2.BigQuery - https://youtu.be/ImSrmrC0aFI

3.Dataflow - https://youtu.be/sfBxpHzPrIg

4.Dataprep - https://youtu.be/uhnNswM3cDE

5.Dataproc - https://youtu.be/lHYHXzFCF10

6.Demo: Dataproc - https://youtu.be/HEQvXxTBuH4

7.Module Review - https://youtu.be/RgKsNJG6Rso

8.Course Series Review - https://youtu.be/JuKqF8Z98Xs

**Course – 6**

**Getting Started with Google Kubernetes Engine**

**Course Introduction**

1.Course Introduction - <https://youtu.be/ga419uZCoC4>

**Introduction to Google Cloud**

1.Introduction - https://youtu.be/H5hKCNhhIFs

2.Cloud Computing and Google Cloud - https://youtu.be/LTO1DbM-fAs

3.Resource Management - https://youtu.be/k9HQKihnBVI

4.Billing - https://youtu.be/RlCOzjhH484

5.Interacting with Google Cloud - https://youtu.be/t3yx6rVd774

6.Lab Intro: Accessing the Google Cloud Console and Cloud Shell - https://youtu.be/HLAEFHPBIhg

7.Lab Solution: Accessing the Google Cloud Console and Cloud Shell - https://youtu.be/hbsQxbeXTAA

8.Summary - <https://youtu.be/cCwkE65YDz0>

**Introduction to Containers and Kubernetes**

1.Introduction - https://youtu.be/o9zZmlWy3Ng

2.Introduction to Containers - https://youtu.be/7ZXkUZKGb2M

3.Containers and Containers Images - https://youtu.be/i1Q0d-V0ILw

4.Lab Intro : Working with Cloud Build - https://youtu.be/Dh7ZcHCife8

5.Lab Solution : Working with Cloud Build - https://youtu.be/lBsa4fV3lIg

6.Introduction to Kubernetes - https://youtu.be/rr3Lo07gFBw

7.Introduction to Google Kubernetes Engine - https://youtu.be/rxLkv0F80p4

8.Compare Options Detail - https://youtu.be/PQ0xSkZ\_f9I

9.Summary - <https://youtu.be/D_SeKQajFuM>

**Kubernetes Architecture**

1.Introduction - https://youtu.be/cNpGJYXsPBY

2.Kubernetes Concepts - https://youtu.be/6h8ZNLV6twA

3.Kubernetes Control Plane - https://youtu.be/f8-rQMvVNmc

4.Google Kubernetes Engine Concepts - https://youtu.be/tZXcgXFDDTQ

5.Kubernetes Object Management - https://youtu.be/sA84ei7vUB8

6.Lab Intro: Deploying Google Kubernetes Engine - https://youtu.be/9WirU2JVRFU

7.Migrate for Anthos Introduction - https://youtu.be/JeOff4C2MxY

8.Migrate for Anthos Architecture - https://youtu.be/mTpimfN7Rnc

9.Migration Path – https://youtu.be/7rZQZeM-jxA

10.Migration for Anthos Installation – https://youtu.be/6CwTrz2W3TQ

11.Summary - <https://youtu.be/hp17ZVavM4g>

**Introduction to Kubernetes Workloads**

1.Introduction - https://youtu.be/JmfcYHOA6p4

2.The kubectl Command - https://youtu.be/Bodm5oYLuk4

3.Deployments - https://youtu.be/D4Y-SLuIoz0

4.Ways to Create Deployments - https://youtu.be/PBbGlA\_J80M

5.Services and Scaling - https://youtu.be/cOpwLyS3aZY

6.Updating Deployments - https://youtu.be/VBr0fn224JM

7.Blue – Green Deployments - https://youtu.be/FF2f74pYZ1s

8.Canary Deployments - https://youtu.be/mspt95h\_qwg

9.Managing Deployments – https://youtu.be/ZZq\_QJIm6us

10.Lab Intro: Creating Google Kubernetes Engine Deployments - https://youtu.be/rxltfYi\_-nQ

11.Pod Networking - https://youtu.be/FV68tJ1WT-g

12.Volumes – https://youtu.be/QCGMzGUZVK4

13.Volumes Types – https://youtu.be/yAj40oYI2ww

14.The PersistentVolume abstraction – https://youtu.be/NauB2ZtkP4U

15.Lab Intro: Configuring Persistent Storage for Google Kubernetes Engine – https://youtu.be/S4fwQNBYaUI

16.Summary - <https://youtu.be/5Oh-bZkZanE>