

Google Cloud Platform – Professional Cloud Architect

Ashutosh Mishra

- 20+ years of experience in designing and delivery of Enterprise Solutions using Big Data (Hadoop & Serverless), Cloud computing, Microservices and API's, Machine Learning and Artificial Intelligence, Master Data Management, Data Governance, DW/BI and Advanced Analytics streams.
- Consulting experience for global firms across different countries (USA, Europe, Singapore, India, Australia & New Zealand)
- 7+ year of experience in Big Data Architecture using Hadoop based frameworks (Cloudera, Hortonworks) and serverless data lake (AWS, Azure, GCP, Databricks).
- Hybrid and multi-cloud experience across private and public cloud (AWS, Azure, GCP & VMWare).
- Experience across large and complex IT systems including container orchestration, Kubernetes, VMware etc.

GCP: Course Structure

1

Introduction

- ✓ Welcome
- ✓ Course structure
- ✓ Study and Exam tips

2

Cloud Architect Certification & Resources

- ✓ Certification exam guide
- ✓ GCP Resources
- ✓ GCP Artefacts reconciliation sheet

3

The Basics & GCP console tour

- ✓ IAM, Network and Access
- ✓ GCP Console tour
 - ✓ Compute, Storage, Databases
 - ✓ Networking, Operations, Tools
 - ✓ Big Data & AI

4

Certification Case Study

- ✓ EHR Healthcare
- ✓ Helicopter Racing League
- ✓ TerramEarth
- ✓ Mountkirk Games

5

Google Cloud Core Services

- | | | |
|--|--|--|
| ✓ Network <ul style="list-style-type: none">• VPC• Hybrid Networking• Load Balancing | ✓ Storage <ul style="list-style-type: none">• Cloud Storage• Block Storage• Data Transfer | ✓ Big Data <ul style="list-style-type: none">• Composer, Dataproc• Pub/Sub, Dataflow• BigQuery• Looker• Data Fusion, Dataprep• Data Catalog |
| ✓ Compute <ul style="list-style-type: none">• Compute Engine• App Engine• Kubernetes Engine• Cloud Functions• Cloud Run | ✓ Databases <ul style="list-style-type: none">• Cloud SQL, Spanner• Datastore, Firestore, Memorystore• BigTable• BigQuery• Database Migration | ✓ Artificial Intelligence <ul style="list-style-type: none">• AI Platform• Document AI• Natural Language• Recommendation AI• Translation• Vision, Video Intelligence |
| ✓ Security <ul style="list-style-type: none">• Security Command Center• IAM, Data Security, Network Security | ✓ Operations <ul style="list-style-type: none">✓ Cloud Monitoring, Logging & Error Reporting✓ Application Performance Management | |

7

Reference Architecture

- ✓ Data lifecycle architecture
- ✓ Industry use cases

8

Case Study - Solution

- ✓ EHR Healthcare
- ✓ Helicopter Racing League
- ✓ TerramEarth
- ✓ Mountkirk Games

9

Certification Refresher & Test

- ✓ 1 hour refresher video of all GCP services and architecture landscape
- ✓ Test Questions & Mock test

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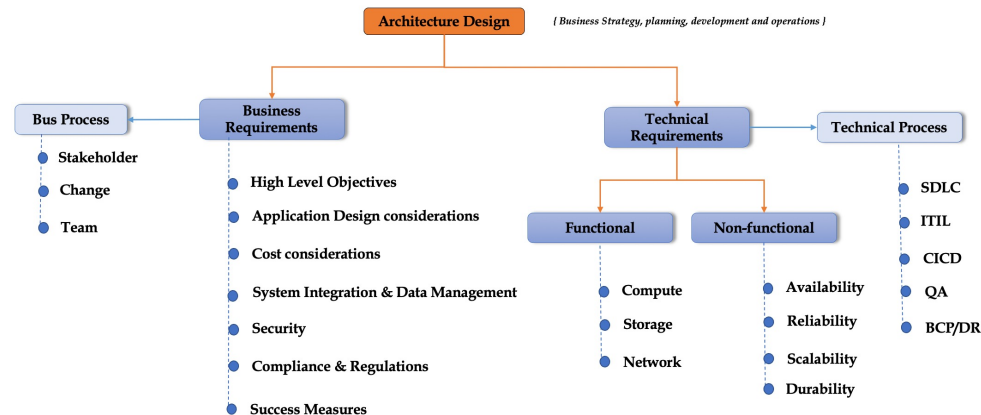
GCP Advanced Knowledgebase

- ✓ Next '20 Update
- ✓ Multi and Hybrid Cloud (Anthos)
- ✓ Advanced Machine Learning
- ✓ Kubernetes Engine (Advanced)
- ✓ GCP Tools
- ✓ Labs - Capstone (Solutions based)
- ✓

6

Architecture landscape

- ✓ Business & Technical Requirements
- ✓ Microservices, 12 factor App & DevOps
- ✓ Google Cloud Architecture Framework



GCP: 3 Day Challenge

	9 AM - 10:30 AM	Break (30 mins)	11 AM - 12:30 PM	Lunch (60 mins)	1:30 PM - 3 PM	Break (30 mins)	3:30 PM - 4:30 PM
<u>Day 1</u>	<div>1 Introduction</div> <ul style="list-style-type: none"> ✓ Welcome ✓ Course structure <div>2 Certification & Resources</div> <ul style="list-style-type: none"> ✓ Exam Guide ✓ Resources <div>Review Exam Guide, Review GCP Resources, Create GCP login</div>		<div>3 The Basics & GCP console tour</div> <ul style="list-style-type: none"> ✓ IAM, Network and Access ✓ GCP Console tour <div>4 Certification Case Study</div> <ul style="list-style-type: none"> ✓ 3 case studies <div>Practice with GCP console, Review case studies</div>		<div>5 GCP Core Services</div> <ul style="list-style-type: none"> ✓ Compute <div>Labs -Network</div>		<div>5 GCP Core Services</div> <ul style="list-style-type: none"> ✓ Network ✓ Storage <div>Labs -Compute Engine & Storage</div>
<u>Day 2</u>	<div>5 GCP Core Services</div> <ul style="list-style-type: none"> ✓ Databases <div>Labs -Databases</div>		<div>5 GCP Core Services</div> <ul style="list-style-type: none"> ✓ Security ✓ Operations <div>Labs -Security, Operations</div>		<div>5 GCP Core Services</div> <ul style="list-style-type: none"> ✓ Big Data <div>Labs -Big Data</div>		<div>5 GCP Core Services</div> <ul style="list-style-type: none"> ✓ AI <div>Labs -AI</div>
<u>Day 3</u>	<div>6 Architecture Landscape</div> <ul style="list-style-type: none"> ✓ Business & Technical Requirements ✓ Google Cloud Architecture Framework <div>Study -Review Google Architecture Docs</div>		<div>7 Reference Architecture</div> <ul style="list-style-type: none"> ✓ Data lifecycle architecture ✓ Industry use cases <div>8 Case Study - Solution</div> <ul style="list-style-type: none"> ✓ 3 case studies <div>Study -Review Case Studies</div>		<div>9 GCP Refresher</div> <ul style="list-style-type: none"> ✓ 1 hour refresher video of all GCP services and architecture landscape 		<div>9 Mock Test</div> <ul style="list-style-type: none"> ✓ Certification Mock Test

Legend:

Self Study
and Labs