



Architecting with Google Compute Engine

Overview

Welcome to "Architecting with Google Compute Engine," a comprehensive course designed to provide you with the foundational knowledge and skills needed to effectively design, develop, and deploy applications on Google Cloud Platform (GCP). Whether you're an aspiring cloud architect, a developer looking to expand your cloud computing skills, or an IT professional seeking to leverage GCP for your organization's needs, this course offers the essential insights and hands-on experience you need to succeed.

Objectives

- Introduction to Google Cloud Platform (GCP)
- Google Compute Engine (GCE)
- Networking in GCP
- Storage Solutions
- Infrastructure Automation
- Scaling Applications
- Security and Identity Management
- Monitoring and Logging

Prerequisites

Required

- Systems operations experience, including deploying and managing applications, either on-premises or in a public cloud environment
- Basic proficiency with command-line tools and Linux operating system environments

Recommended

- Google Cloud Fundamentals: Core Infrastructure

Course Duration

- 3 Days – 24 Hours

Career Role

- Cloud Engineer

Creating Tailor - Made Training Programs to Meet Your **Specific Goals**

Discovery Process

Join us on a discovery journey to uncover your organization's unique needs. Through insightful conversations and meticulous analysis, we'll identify your training requirements.

01



Training Framework Development

We'll craft a custom roadmap to boost your team's skills, integrating advanced instructional design for engaging, comprehensive training.

02



Program Delivery

We'll bring your training vision to life with precision and care. Our seasoned trainers will expertly guide transformative learning experiences, fostering engagement and skill acquisition at every step.

03



Outcome Assessment

We'll continuously evaluate training effectiveness through robust methodologies, gathering and analyzing participant feedback for invaluable insights and improvement opportunities.

04



Cost-Benefit Analysis

We'll quantify the tangible and intangible benefits of your training investment, showcasing improved performance metrics and heightened employee satisfaction, proving the substantial returns from our partnership.

05



Course Outline

"Architecting with Google Compute Engine" is a comprehensive course designed for cloud architects and engineers who want to leverage Google Cloud Platform (GCP) to design, build, and operate secure, scalable, and highly available infrastructure solutions. This course covers the core concepts, tools, and best practices necessary to effectively utilize Google Compute Engine (GCE) and other related services in GCP. Participants will gain hands-on experience through practical labs and real-world scenarios, ensuring they are well-equipped to implement robust cloud architectures.

Module 1: Introduction to Google Cloud Platform

- Lesson: List the different ways of interacting with GCP
- Lesson: Use the GCP Console and Cloud Shell
- Lesson: Create Cloud Storage buckets
- Lesson: Use the GCP Marketplace to deploy solutions

Module 2: Virtual Networks

- Lesson: List the VPC objects in GCP
- Lesson: Differentiate between the different types of VPC networks
- Lesson: Implement VPC networks and firewall rules
- Lesson: Design a maintenance server

Module 3: Virtual Machines

- Lesson: Recall the CPU and memory options for virtual machines
- Lesson: Describe the disk options for virtual machines
- Lesson: Explain VM pricing and discounts
- Lesson: Use Compute Engine to create and customize VM instances

Module 4: Cloud IAM

- Lesson: Describe the Cloud IAM resource hierarchy
- Lesson: Explain the different types of IAM roles
- Lesson: Recall the different types of IAM members
- Lesson: Implement access control for resources using Cloud IAM

Module 5: Storage and Database Services

- Lesson: Differentiate between Cloud Storage, Cloud SQL, Cloud Spanner, Cloud Firestore and Cloud Bigtable
- Lesson: Choose a data storage service based on your requirements
- Lesson: Implement data storage services

Module 6: Resource Management

- Lesson: Describe the cloud resource manager hierarchy
- Lesson: Recognize how quotas protect GCP customers
- Lesson: Use labels to organize resources
- Lesson: Explain the behavior of budget alerts in GCP
- Lesson: Examine billing data with BigQuery

Module 7: Resource Monitoring

- Lesson: Describe the Stackdriver services for monitoring, logging, error reporting, tracing, and debugging
- Lesson: Create charts, alerts, and uptime checks for resources with Stackdriver Monitoring
- Lesson: Use Stackdriver Debugger to identify and fix errors

Module 8: Interconnecting Networks

- Lesson: Recall the GCP interconnect and peering services available to connect your infrastructure to GCP
- Lesson: Determine which GCP interconnect or peering service to use in specific circumstances
- Lesson: Create and configure VPN gateways
- Lesson: Recall when to use Shared VPC and when to use VPC Network Peering

Module 9: Load Balancing and Autoscaling

- Lesson: Recall the various load balancing services
- Lesson: Determine which GCP load balancer to use in specific circumstances
- Lesson: Describe autoscaling behavior
- Lesson: Configure load balancers and autoscaling

Module 9: Infrastructure Automation

- Lesson: Automate the deployment of GCP services using Deployment Manager or Terraform
- Lesson: Outline the GCP Marketplace

Module 10: Managed Services

- Lesson: Describe the managed services for data processing in GCP

Indus Tech Services

Who We Are....

Indus Tech Services is an IT company that specializes in providing comprehensive training, consulting & implementation services for software solutions designed to address the diverse business challenges faced by organizations today. With a passion for technology and a deep understanding of business processes, Indus Tech is committed to empowering businesses to optimize their operations, boost productivity, and drive sustainable growth.

Indus Tech Services and Google Cloud Partnership

At **Indus Tech Services**, our partnership with **Google Cloud (GCP)** provides unparalleled consulting and training services to help you harness the full potential of cloud technology. Our collaboration aims to deliver the following benefits to your organization.

- **Customized Training and Workshops:** We offer tailored training programs and workshops designed to empower your IT team and end users. Our expert-led sessions ensure your team gains the skills and knowledge needed to maximize the benefits of Google Cloud solutions.
- **Expert Consulting Services:** Our team of certified Google Cloud professionals provides strategic consulting to align your cloud initiatives with your business goals. From cloud strategy development to architectural design, we offer expert guidance to help you navigate the complexities of cloud adoption and optimization.
- **Seamless Implementation and Integration:** We specialize in the seamless implementation and integration of Google Cloud services into your existing infrastructure. Our proven methodologies and best practices ensure a smooth transition to the cloud, minimizing disruption and maximizing efficiency.

Why Choose Us...

From time to time, life serves up a profound nudge, urging us to step beyond our routines and make a difference in the world. Indus Tech Services emerged from one such compelling wake-up call. We are not just a company; we are a dedicated force with a belief in providing solutions to organizations, regardless of their size, and we infuse a human touch into everything we do.

Our Expertise

With over 25 years of collective experience navigating the intricacies of daily business transactions, irrespective of geographical, cultural, time zone, or language barriers, our team has honed their expertise to meet any challenge head-on. This wealth of experience has armed our resources with an unparalleled understanding and skill set to tackle a broad spectrum of obstacles.

Training

With two decades of unwavering commitment and a global footprint, our company is a true pioneer in the fields of linguistic, transactional, technical, and behavioural training for some of the world's largest corporate entities. Our unparalleled expertise has been refined through years of dedication and innovation, making us the go-to choice for businesses seeking transformative training solutions.

Consulting

Our company has been at the forefront of providing world-class IT consulting services to organizations spanning the globe. With an extensive and proven track record, we have honed our expertise to meet the ever-evolving technological needs and challenges faced by businesses, regardless of their scale or industry.

Implementation

Our experience covers a broad spectrum of IT implementation services, including system integration, software deployment, network architecture, cloud migration, and infrastructure setup. We understand that the successful execution of IT projects is pivotal to an organization's growth and efficiency. Therefore, we bring a depth of knowledge and a commitment to delivering results that set us apart.

To know more contact us at info@industechservices.com or call us at +91 - 99961 61170.