

Course Name : **CLOUD COMPUTING ESSENTIALS**
Duration : **2 Days**
Skill Level : **Beginner**
Mode : **Physical Classroom or Online Live Instructor**

COURSE DESCRIPTION:

In this course, the candidates will learn foundational cloud computing skills that will set you on your path to a career in cloud computing. In the first lesson, you will learn about fundamental concepts such as the advantages of cloud computing, deployment models, and the similarities and differences across major cloud service providers. In subsequent lessons, you will gain valuable hands-on practice using AWS to create identity and access management policies, store data in an S3 storage bucket, and launch an ec2 instance and set up automated provisioning. In the final lesson, you will be introduced to serverless architecture and data storage using AWS ElastiCache.

WHAT WILL YOU LEARN?

- Learn general cloud computing concepts
- Learn the basics of Amazon Web Services (AWS)
- Gain an understanding of the fundamental systems on which the cloud is based
- Develop hands-on skills using core Amazon Web Services (AWS) services
- Compute Services
- Serverless Architecture and Data Storage
- Build knowledge from beginner level to advanced concepts

PREREQUISITE:

Beginners. No programming knowledge is required.

METHODOLGY:

This program will be conducted with interactive lectures, PowerPoint presentation, discussions, and practical exercise. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

JOB SCOPE:

After completing this course, the candidates can join for the following job roles,

- Cloud Engineer
- Cloud Software Developer
- DevOps Engineer
- AWS Cloud Engineer
- Cloud and Security Specialist
- AWS Operations Specialist
- Cloud Infrastructure Engineer

MODULE 1: INTRODUCTION TO CLOUD COMPUTING

- Welcome
- Introduction
- Benefits of Cloud Computing
- Cloud History
- Stakeholders
- Types of Cloud Computing
- Deployment Models
- Major Providers
- Costs
- Edge Cases
- Intuition

MODULE 2: FUNDAMENTAL CLOUD CONCEPTS

- Fundamentals
- Lesson Outline
- Cloud Characteristics
- Virtualization
- Edge Cases

MODULE 3: AWS CONSOLE & ACCESSING CLOUD SERVICES

- Big Picture
- Signing Up With AWS
- Usage Alerts
- Multi-Factor Authentication
- Edge Case: MFA and IAM
- Securing Root User With MFA
- AWS Console
- IAM
- IAM Users
- IAM Policies
- Simple Storage Service (S3)
- AWS Account Setup
- Monitor your AWS Costs and Credits

MODULE 4: COMPUTE SERVICES

- Big Picture
- Launching an EC2 Instance
- Security Group
- Terminate Instance
- Init Script
- Elastic IP
- IAM Role
- Overriding NGINX Defaults
- Edge Cases

MODULE 5: CLOUD DB AND SERVERLESS COMPUTING

- Big Picture
- ElastiCache
- IAM Policies
- Lambda Functions
- Testing Lambda
- API Gateway
- Postman
- Clean Up
- Edge Cases

CONCLUSION

- QA
- Useful References and Books
- Feedback