

Comprehensive AWS Cloud Engineering

Duration: 26 Hrs

Module 1: Introduction to AWS

- Introduction to Cloud Computing
- Introduction to AWS
- AWS Global Infrastructure
- Aws Well Architected Framework

Module 2: IAM

- AWS Identity and Access Management (IAM)
- Policies
- IAM roles
- Cross Account identity access management
- AWS CLI/ Gossamer
- Lab:** Working with IAM users, Policies and Roles

Module 3: Networking

- IP Addressing
- Amazon VPC
- Routing
- Internet Access
- Network ACLs
- Security Groups
- VPC Peering
- Virtual Private EndPoints
- Lab:** Building Amazon VPC infrastructure

Module 4: Compute

- AWS Compute Services
- AMI
- Amazon Elastic Compute Cloud (Amazon EC2) instances, selection, and pricing
- AWS Lambda
- Lab:** Working With Ec2 Instances

Module 5: AWS Storage

- Amazon S3
- S3 Features
- Shared File Systems
- Data Migration Tools
- Lab:** Working with Amazon S3

Module 6: AWS Database solutions

- Amazon RDS and Amazon Aurora
- Amazon Dynamo DB
- Amazon Redshift
- Database Caching
- Database Migration Tools

Lab: Working with RDS

Module 7: Monitoring

Amazon Cloud Watch

AWS Cloud Trail

Elastic Load Balancing

AutoScaling

Lab: Monitoring your infrastructure with Cloud Watch

Module 8: Infrastructure Deployment and management

AWS Cloud Formation

AWS Systems Manager

AWS Systems Manager Tools

Module 9: Containers

Microservices

Containers

Container Services ECR, ECS, EKS and Fargate

Lab: Deploy Container based Application on Amazon ECR

Module 10: DevOps

What is DevOps

AWS Devops Tools

AWS Code Pipeline

Code Deployment Strategies

Lab: Set Up a Continuous Deployment Pipeline Using AWS CodePipeline

Module 11: Data Analytics

Kinesis

Athena

EMR

Lab: Processing Server Logs on Amazon EMR

Module 12 : AI& ML

Sagemaker

AWS Bedrock

LLM on Bedrock

OCR

Lab: Build a Serverless Web Application using Generative AI