AWS FinOps Cloud Cost Management

Duration: 2 days (8hrs/day)

Prerequisites:

- Understand the basics of IT
- Understand the basics of Cloud Computing
- Desire to save & make money in the cloud

Course Objective: This comprehensive course will help you implement FinOps principles & cloud operating models that lead to cultural change & sustainable cloud savings. Create visibility into distributed cloud spending with advanced data analytics, dashboards & reporting. Understanding the AWS discount models: Savings Plans, Reservations, Reserved Instance. Apply Cost allocation strategies to create accountability for cloud spend with Showback & Chargeback.

Demonstration Requirement: Participant AWS Trial Account Required

Module 1 – Introduction

Introduction to Cloud Pricing

Importance of Pricing in Cloud VS. Pricing in On Premise Data Center

Why FinOps is important

Module 2 – Pricing Research

Pricing Research - in General

Pricing Research - AWS EC2 Pricing

Pricing Research - AWS S3 Pricing

AWS Pricing Calculator - Cost Estimation Basics & Use Cases

Demonstration: AWS Pricing Calculator

Module 3 – AWS Saving Plans, AWS Reservations, AWS Reserved Instances

Savings Plans & Reservations - Overview

Savings Plans - Overview

Demonstration: Savings Plans

Budgets for Savings Plans

EC2 Reserved Instances

Reservations for RDS, ElastiCache, OpenSearch, Redshift, DynamoDB

Savings Plans VS. Reserved Instances - Comparison bringing it all together

Module 4 – FinOps and CCOE

Governance Principle

Cloud Operating Model

Cloud Center of Excellence (CCOE)

FinOps

Module 5 – Accountability with Showback, Chargeback, Shared Cost and Billing

Accountability Principle

Showback

Chargeback

Shared Costs

AWS Billing Conductor

Module 6 – Cost Allocations

Cost Allocation Principle

AWS Accounts - Overview & Use

AWS Accounts - Cost Management Considerations

AWS Accounts - Ideas & Criteria for Account Separation

AWS Organizations

Service Control Policies (SCPs) to manage cloud costs

AWS Control Tower to Automate AWS Account Creation

Module 7 – Tagging and Cost Categories

Tags - Basics, Uses, Examples, Recommendations

Tags - Cost Allocation Tags - Enabling Tags for AWS Cost Management with Demo

Tags - Enforcement with Organizations, SCPs, Tag Policies, IAM, CloudFormation.

Demonstration: Service Control Policies for Tag Usage Enforcement

Tags - Viewing with Cost Explorer

Tags - Modifying with Resource Groups & Tag Editor with Demo

Tags - Alerting with Amazon EventBridge & AWS Config with Demo

AWS Cost Categories

Demonstration: Creating AWS Cost Categories & Viewing with Cost Explorer

Module 8 – AWS Cloud Watch and Billing Console

AWS Billing Console - Demonstration

AWS Billing Alarms using Cloudwatch - Basics & Use Cases

Demonstration: AWS Billing Alarms using Cloudwatch

Module 9 – AWS Cost Explorer and Visibility Principle

Visibility Principle

AWS Cost Explorer - Features, Use Cases, Best Practices

Demonstration: AWS Cost Explorer

AWS Cost Anomaly Detection - Features, Benefits, Uses

Demonstration: AWS Cost Anomaly Detection - Setup, Configuration & Viewing

AWS Cost & Usage Reports - Overview & Usage

Demonstration: AWS Cost & Usage Reports

AWS Cost & Usage Reports - Data Columns / Fields / Properties

AWS Cost & Usage Reports - Amazon Athena, Amazon Quicksight, Amazon Redshift

Module 10 – Cloud Intelligence Dashboards

Intro - Cloud Intelligence Dashboards

Cloud Intelligence Dashboards - Overview

Demonstration: CUDOS, CID & KPI Dashboards

Demonstration: CUDOS Dashboard

Module 11 – Cloud Optimization Strategies

Cost Optimization Pillars

Design with Cost in Mind

Standards, Decision Trees, Playbooks

PaaS VS. IaaS (Platform as a Service VS. Infrastructure as a Service)

Serverless AWS Lambda rather than EC2 for Compute

Autoscaling

EC2 Spot Instances

AWS Trusted Advisor

Module 12 – AWS Budgets

Intro - AWS Budgets

AWS Budgets - Features, Importance, Fundamentals

AWS Budgets - Examples, Use Cases

Demonstration: AWS Budgets - Creating Monthly Forecast Budget

Demonstration: AWS Budgets - Creating S3 Actuals Budget

Demonstration: AWS Budgets - Creating Budget Reports