

# **CTR-701 AWS Practical Introductions**

### **Course Details:**

### 1. AWS Basics

**Introduction to Cloud Computing** 

- What is Cloud Computing?
- Benefits of Cloud Computing
- Types of Cloud Computing: Public, Private, and Hybrid

#### Introduction to AWS

- Overview of AWS
- AWS Global Infrastructure
- AWS Management Console

# AWS Identity and Access Management (IAM)

- Users, Groups, and Roles
- IAM Policies
- Multi-Factor Authentication (MFA)
- Best Practices for IAM

### 2. AWS Basic Services

Amazon EC2 (Elastic Compute Cloud)

- Overview of EC2
- EC2 Instance Types
- Launching and Managing Instances
- EC2 Pricing and Billing

### Amazon S3 (Simple Storage Service)

- Overview of S3
- S3 Buckets and Objects
- S3 Storage Classes
- S3 Security and Access Control

### AWS RDS (Relational Database Service)

- Overview of RDS
- Database Engines Supported by RDS
- Creating and Managing RDS Instances
- RDS Backup and Recovery

## AWS Lambda

- Overview of AWS Lambda
- Creating and Deploying Lambda Functions
- Lambda Triggers and Event Sources
- Lambda Pricing



### 3. AWS Networking

**VPC (Virtual Private Cloud)** 

- Overview of VPC
- Subnets, Route Tables, and Gateways
- Security Groups and Network ACLs
- VPC Peering and VPN

### Elastic Load Balancing (ELB) and Auto Scaling

- Overview of ELB
- Types of Load Balancers
- Configuring Auto Scaling
- Auto Scaling Policies

### AWS Route 53

- Overview of Route 53
- DNS Management
- Domain Registration
- Routing Policies

### 4. AWS Cost Management

**AWS Pricing and Billing** 

- Understanding AWS Pricing Models
- Cost and Usage Reports
- AWS Free Tier

### **AWS Cost Management Tools**

- AWS Budgets
- AWS Cost Explorer
- AWS Trusted Advisor
- Best Practices for Cost Management

### 5. AWS AI Services Introduction

Introduction to AWS AI Services

- Overview of AWS AI and Machine Learning Services
- Use Cases of AWS AI Services

## **Amazon Rekognition**

- Overview of Amazon Rekognition
- Image and Video Analysis
- Use Cases and Applications

### Amazon Lex

- Overview of Amazon Lex
- Building Chatbots with Amazon Lex
- Integration with Other AWS Services

### **Amazon Polly**

- Overview of Amazon Polly
- Text-to-Speech Conversion
- Customizing Speech Output





## Amazon SageMaker

- Overview of Amazon SageMaker
- Building, Training, and Deploying Machine Learning Models
- SageMaker Notebooks and Endpoints
- Integrating SageMaker with Other AWS Services