



## AWS Cloud Master

### **Description:**

AWS is one of the major cloud providers across the globe comes with a variety of services in different tech stacks and getting certification in AWS plays a vital role to get various opportunities such as cloud administrator, cloud developer, Solution Architect, Machine Learning Speciality, Big Data Speciality, etc. This entire curriculum is designed keeping all the things in mind, so that person can learn, develop and implement in real-time.

### **Start Date:**

### **Doubt Clear Time:**

### **Course Time:**

### **Features:**

# Online Instructor-led learning

# Doubt Clearing

# Proper Roadmap for AWS Certification

# Lifetime Dashboard access

# Recording of Live Class

# Material

# Interview Questions

# Resume Building

# Career Guidance

# Quiz in every module

# Certificate

### **What we learn:**

# AWS Certification

# All Services

# Real time implementation

# Understanding of cloud services w.r.t ML, DL,etc by implementing Projects

# ETL Pipeline

# ML/DL Model Testing and Monitoring

# Understand different Cloud Computings, EC2, Elastic Bean, AWS Lightsail, and more

# Scenario based questions in AWS Certification

### **Requirements:**

# AWS account

# A Windows, Linux, or MAC system

# Your Dedication

### **Instructor:**

### **Name:**

Sachin Agarwal

**Description:**

Awesome teacher

**>Cloud Introduction:**

>>What is Cloud?

>>Why cloud is required?

>>Introduction to AWS Portal

>>Services provided by AWS

>>Various level of Certification Exams by AWS

>>Benefits of Certification

>>Preparation Strategy

>>Marks Distribution of various exams in AWS

>>Comparison with Different Cloud

**>Let's Get Started:**

>>Account Creation

>>Internal Service Overview

>>Costing

>>AWS Cost Explorer

>>AWS Budget

>>AWS Marketplace Subscription

>>AWS Application Post Profiler

>>Cost Anomaly Detection

>>Rightsizing recommendations

>>Saving

>>Utilization Report

>>Converge Report

>>Billing Console

>>Budget Report

>>Cost & Usage Reports

>>Cost Categories

>>Cost allocation tags

>>Orders and invoices

>>Credits

>>Purchase orders

**>Identity and Access**

**Management (IAM):**

>>What is IAM?

>>Uses of IAM

>>Access management

>>User groups

>>Users

>>Roles

>>Difference between Users and Groups

>>Policies

>>Difference between Policies and Roles

- >>Identity providers
- >>Account settings
- >>Access reports
- >>Access analyzer
- >>Archive rules
- >>Analyzers
- >>Settings
- >>Credential report
- >>Organization activity
- >>Service control policies (SCPs)
- >>Resource Access Manager
- >>Shared by me
- >>Resource shares
- >>Shared resources
- >>Principals

### **>AWS Single Sign-On:**

- >>AWS SSO prerequisites
- >>Enable AWS SSO
- >>Choose your identity source
- >>Set up SSO to your AWS accounts
- >>Set up SSO to your applications

### **>AWS Signer:**

>>AWS Signer console

>>Signer CLI

>>AWS Serverless Application Model (AWS SAM) CLI

## **>EC2:**

>>EC2 Dashboard

>>Events

>>Tags

>>Limits

>>Instances

>>Instance Types

>>Launch Templates

>>Spot Requests

>>Savings Plans

>>Reserved Instances

>>Dedicated Hosts

>>Capacity Reservations

>>Images

>>AMIs

>>Elastic Block Store

>>Volumes

>>Snapshots

>>Lifecycle Manager

>>Network & Security

- >>Security Groups
- >>Elastic IPs
- >>Placement Groups
- >>Key Pairs
- >>Network Interfaces
- >>Load Balancing
- >>Load Balancers
- >>Target Groups
- >>Auto Scaling
- >>Launch Configurations
- >>Auto Scaling Groups
- >>Family of EC2
- >>EC2 Costing
- >>EC2 Pricing Models

## **>VPC:**

- >>VPC Dashboard
- >>Filter by VPC
- >>Select a VPC
- >>VIRTUAL PRIVATE CLOUD
- >>Your VPCs
- >>Subnets
- >>Route Tables
- >>Internet Gateways

- >>Egress Only Internet Gateways
- >>DHCP Options Sets
- >>Elastic IPs
- >>Managed Prefix Lists
- >>Endpoints
- >>Endpoint Services
- >>NAT Gateways
- >>Peering Connections
- >>SECURITY
- >>Network ACLs
- >>Security Groups
- >>REACHABILITY
- >>Reachability Analyzer
- >>DNS FIREWALL
- >>Rule Groups
- >>Domain Lists
- >>AWS NETWORK FIREWALL
- >>Firewalls
- >>Firewall policies
- >>Network Firewall rule groups
- >>VIRTUAL PRIVATE NETWORK (VPN)
- >>Customer Gateways
- >>Virtual Private Gateways
- >>Site-to-Site VPN Connections



- >>Client VPN Endpoints

- >>TRANSIT GATEWAYS

- >>Transit Gateways

- >>Transit Gateway Attachments

- >>Transit Gateway Route Tables

- >>Transit Gateway Multicast

- >>Network Manager

- >>TRAFFIC MIRRORING

- >>Mirror Sessions

- >>Mirror Targets

- >>Mirror Filters

- >>Settings

- >AWS LightSail:**

- >>What is LightSail?

- >>Difference between EC2 and Light Sail

- >>Instances

- >>Containers

- >>Databases

- >>Networking

- >>Storeage

- >>Snapshots

- >AWS Lambda:**

- >>What is AWS Lambda
- >>What is a Lambda function?
- >>Extend other AWS services with custom logic
- >>Build custom back-end services
- >>Bring your own code
- >>Completely automated administration
- >>Built-in fault tolerance
- >>Package and deploy functions as container images
- >>Automatic scaling
- >>Connect to relational databases
- >>Fine grained control over performance
- >>Connect to shared file systems
- >>Run code in response to Amazon CloudFront requests
- >>Orchestrate multiple functions
- >>Integrated security model
- >>Trust and integrity controls
- >>Flexible resource model
- >>"Integrate Lambda with your favorite operational tools "

## **>AWS Storage:**

- >>What are storages?
- >>Diffrent types of Storage
- >>S3
- >>EFS

>>FSx

>>S3 Glacier

>>Storage Gateway

>>AWS Backup

>>What are the uses of S3?

>>S3 Setup

>>What are buckets?

>>Policy Setup

>>Accessing Data from S3

>>Pricing of S3

>>Elastic File System

>>AWS Data Sync

>>AWS Transfer

>>Uses and Access

>>Security

>>Flexibility

## **>AWS Databases:**

>>What are Databases?

>>Different Types of Databases

>>RDS

>>DynamoDB

>>ElastiCache

>>Neptune

- >>Amazon QLDB
- >>Amazon DocumentDB
- >>Amazon Keyspaces
- >>Amazon Timestream
- >>RDS Dashboard
- >>RDS Databases
- >>RDS Query Editor
- >>RDS Performance Insights
- >>RDS Snapshots
- >>RDS Automated backups
- >>RDS Reserved instances
- >>RDS Proxies
- >>RDS Subnet groups
- >>RDS Parameter groups
- >>RDS Option groups
- >>RDS Events
- >>RDS Event subscriptions
- >>RDS Recommendations
- >>RDS Certificate update

## **>AWS        Management        & Governance:**

- >>CloudWatch
- >>AWS Auto Scaling

- >>CloudFormation
- >>CloudTrail
- >>Config
- >>OpsWorks
- >>Service Catalog
- >>Systems Manager
- >>AWS AppConfig
- >>Trusted Advisor
- >>Control Tower
- >>AWS License Manager
- >>AWS Well-Architected Tool
- >>Personal Health Dashboard
- >>AWS Chatbot
- >>Launch Wizard
- >>AWS Compute Optimizer
- >>Resource Groups & Tag Editor
- >>Amazon Grafana
- >>Amazon Prometheus
- >>AWS Proton
- >>Incident Manager

**>AWS Advanced Stack:**

- >>Amazon SageMaker
- >>Amazon Augmented AI

- >>Amazon CodeGuru
- >>Amazon DevOps Guru
- >>Amazon Comprehend
- >>Amazon Forecast
- >>Amazon Fraud Detector
- >>Amazon Kendra
- >>Amazon Lex
- >>Amazon Personalize
- >>Amazon Polly
- >>Amazon Rekognition
- >>Amazon Textract
- >>Amazon Transcribe
- >>Amazon Translate
- >>AWS DeepComposer
- >>AWS DeepLens
- >>AWS DeepRacer
- >>AWS Panorama
- >>Amazon Monitron
- >>Amazon HealthLake
- >>Amazon Lookout for Vision
- >>Amazon Lookout for Equipment
- >>Amazon Lookout for Metrics

**>AWS Analytics:**

>>Analytics

>>Athena

>>Amazon Redshift

>>EMR

>>CloudSearch

>>Elasticsearch Service

>>Kinesis

>>QuickSight

>>Data Pipeline

>>AWS Data Exchange

>>AWS Glue

>>AWS Lake Formation

>>MSK

>>AWS Glue DataBrew

>>Amazon FinSpace

### **>AWS Machine Learning:**

>>AWS Sagemaker

>>AWS Sagemaker Groundtruth

>>AWS Sagemaker Neo

>>ML Training

>>AWS Machine Learning Embark

>>Enterprise search using Amazon Kendra

>>Automated code reviews using AWS Codeguru

>>Chatbots using Amazon Lex

## **>AWS Data Analytics:**

>>Fraud Prevention using Amazon Fraud Detector

>>Demand forecasting using Amazon Forecast

>>Detect Anomalies in Metrics

## **>AWS Reinforcement Learning:**

>>AWS DeepComposer

>>AWS DeepRacer

>>AWS DeepLens

## **>AWS Deep Learning:**

>>AWS DL AMI's

>>AWS DL Containers

>>EC2 P3 GPU Instances

>>EC2 Inf1 AWS Inferentia Instances

>>EC2 G4 GPU Instances

>>EC2 C5 CPU Instances

>>EC2 F1 FPGA Instances

>>Elastic Inference

>>AWS Inferentia

>>AWS Neuron SDK

>>Edge



>>Tensorflow on AWS

>>Pytorch on AWS

>>Apache MXNet on AWS

### **>AWS Computer Vision:**

>>Image and video analytics using Amazon Rekognition

>>Document analysis using Amazon Textract

>>Spot Products defects and automate quality inspection

>>Improve operations with CV at the edge

>>Image and Video analysis

### **>AWS NLP:**

>>Bots and Virtual Agent

>>Speech to Text

>>Text to Speech

>>Personalized Recommendations using Amazon Personalize

>>Real Time Translations using Amazon Translate

>>Text to speech using Amazon Polly

>>Transcription using Amazon Transcribe

>>Advanced text analytics using Amazon Comprehend

### **>AWS Big Data:**

>>Apache Spark

>>Apache Hive

>>Apache HBase

>>Apache Flink

>>Apache Hudi

>>Presto

**>Closure:**

>>Final Touch for AWS Certifications

>>Exam Preparation

>>Interview Question Discussion

>>Certification Question Discussion

>>End to End Setup and Revision