

# AWS Certified Cloud Practitioner

## Structured technical training and certification preparation

A practical, student-friendly outline covering introduction to Cloud Computing, identity and Access Management IAM, elastic Cloud Computing EC2, eC2 Stora...

### MODULES

**18**

### LESSONS

**171**

### FORMAT

Self-paced

## Module Breakdown

### MODULE 1

#### Introduction to Cloud Computing

- Welcome
- Why Cloud Computing
- What is Cloud Computing
- Cloud Computing Deployment Models
- Cloud Computing Types
- AWS Cloud Overview
- AWS Management Console Walk-Through
- AWS Shared Responsibility
- Summary

### MODULE 2

#### Identity and Access Management IAM

- IAM Overview
- IAM Users & Groups Hands-On
- IAM Policies Hands-On
- MFA Overview
- MFA Hands-On
- AWS CLI
- AWS CLI Installation Hands-On
- AWS CLI Hands-On
- IAM Roles
- IAM Roles Hands-On
- IAM Security Tools
- IAM Security Tools Hands-On
- IAM Best Practices
- Shared Responsibility Model for IAM
- IAM Summary

## Module Breakdown (continued)

<p><b>MODULE 3</b></p> <p><b>Elastic Cloud Computing EC2</b></p> <ul style="list-style-type: none"> <li>Budget Setup</li> <li>EC2 Overview</li> <li>EC2 Instance Hands-On</li> <li>Security Groups</li> <li>Security Groups Hands-On</li> <li>SSH Overview</li> <li>SSH Using Putty-Windows</li> <li>SSH Using CMD-Windows</li> <li>EC2 Instance Connect</li> <li>EC2 Instance Roles</li> <li>EC2 Launch Types</li> <li>Shared Responsibility Model for EC2</li> <li>EC2 Summary</li> </ul>	<p><b>MODULE 4</b></p> <p><b>EC2 Storage</b></p> <ul style="list-style-type: none"> <li>Intro to EC2 Instance Storage</li> <li>EBS Volume Overview</li> <li>EBS Volume Hands-On</li> <li>EBS Snapshots</li> <li>EBS Snapshots Hands-On</li> <li>AMI Overview</li> <li>AMI Hands-On</li> <li>EC2 Instance Store</li> <li>EC2 Instance Store Hands-On</li> <li>Elastic File System - EFS</li> <li>Shared responsibility Model for EC2 Storage</li> <li>Section Cleanup</li> <li>EC2 Instance Storage Summary</li> </ul>
<p><b>MODULE 5</b></p> <p><b>Elastic Load Balancer and Auto Scaling Group ELB and ESG</b></p> <ul style="list-style-type: none"> <li>Introduction to Scalability &amp; High-Availability</li> <li>High Availability, Scalability and Elasticity</li> <li>ELB Overview</li> <li>ELB Hands-On</li> <li>ASG Overview</li> <li>ASG Hands-On</li> <li>Section Cleanup</li> <li>Summary</li> </ul>	<p><b>MODULE 6</b></p> <p><b>Amazon S3</b></p> <ul style="list-style-type: none"> <li>S3 Introduction</li> <li>S3 Overview</li> <li>S3 Hands-On</li> <li>S3 Security</li> <li>S3 Bucket Policies Hands-On</li> <li>S3 Websites</li> <li>S3 Website Hands-On</li> <li>S3 Versioning</li> <li>S3 Versioning Hands-On</li> <li>S3 Access Logs</li> <li>S3 Access Logs Hands-On</li> <li>S3 Replication</li> <li>S3 Replication Hands-On</li> <li>S3 Storage Classes</li> <li>Snowball, Snowball Edge and SnowMobile</li> <li>S3 Summary</li> </ul>
<p><b>MODULE 7</b></p> <p><b>Database and Analytics</b></p> <ul style="list-style-type: none"> <li>Database Introduction</li> <li>RDS &amp; Aurora Overview</li> <li>RDS Database Hands-On</li> <li>ElastiCache Overview</li> <li>DynamoDB Overview</li> <li>DynamoDB Hands-On</li> <li>RedShift Overview</li> <li>Amazon EMR Overview</li> <li>Athena Overview</li> <li>AWS Glue</li> <li>DMS Overview</li> <li>Database &amp; Analytics Summary</li> </ul>	<p><b>MODULE 8</b></p> <p><b>Other Services</b></p> <ul style="list-style-type: none"> <li>Other Compute Introduction</li> <li>ECS-Fargate-ECR Overview</li> <li>What is Serverless</li> <li>AWS Lambda</li> <li>AWS Lambda Hands-On</li> <li>AWS Batch</li> <li>AWS LightSail</li> <li>AWS LightSail Hands-On</li> <li>Other Compute Summary</li> </ul>

## Module Breakdown (continued)

<p><b>MODULE 9</b></p> <p><b>Scaling Your Infrastructure</b></p> <ul style="list-style-type: none"> <li>CloudFormation Overview</li> <li>Cloud Formation Hands-On</li> <li>Elastic Beanstalk Overview</li> <li>Elastic Beanstalk Hands-On</li> <li>AWS CodeDeploy</li> <li>AWS SSM</li> <li>AWS OpsWorks</li> <li>Infrastructure at Scale Summary</li> </ul>	<p><b>MODULE 10</b></p> <p><b>Global Applications</b></p> <ul style="list-style-type: none"> <li>Why Global Application</li> <li>Route 53</li> <li>Route 53 Hands-On</li> <li>CloudFront</li> <li>CloudFront Hands-On</li> <li>S3 Transfer Acceleration</li> <li>AWS Global Accelerator</li> <li>Global Application Summary</li> </ul>
<p><b>MODULE 11</b></p> <p><b>Cloud Integration</b></p> <ul style="list-style-type: none"> <li>Cloud Integration Introduction</li> <li>SQS Service</li> <li>SQS Service Hands-On</li> <li>SNS Service</li> <li>SNS Service Hands-On</li> <li>Cloud Integration Summary</li> </ul>	<p><b>MODULE 12</b></p> <p><b>Cloud Monitoring</b></p> <ul style="list-style-type: none"> <li>CloudWatch Metrics and Alarms</li> <li>CloudWatch Metrics and Alarms Hands-On</li> <li>CloudWatch Logs</li> <li>CloudWatch Events and EventBridge</li> <li>CloudWatch Events and EventBridge Hands-On</li> <li>CloudTrail</li> <li>X-Ray</li> <li>Service Health Dashboard</li> <li>Personal Health Dashboard</li> <li>Monitoring Summary</li> </ul>
<p><b>MODULE 13</b></p> <p><b>Virtual Private Network</b></p> <ul style="list-style-type: none"> <li>Settings the Expectations</li> <li>VPC and subnets, Internet Gateway and NAT Gateways</li> <li>VPC and subnets, Internet Gateway and NAT Gateways-Hands-On</li> <li>NACL and Security Groups</li> <li>NACL and Security Groups Hands-On</li> <li>VPC Flow Logs</li> <li>VPC Peering</li> <li>VPC Flow Logs and VPC Peering Hands-On</li> <li>VPC Endpoints</li> <li>VPC Endpoints Hands-On</li> <li>Site-to-Site VPNs and Direct Connect</li> <li>Transit Gateway</li> <li>VPC Summary</li> </ul>	<p><b>MODULE 14</b></p> <p><b>Security and Compliance</b></p> <ul style="list-style-type: none"> <li>Introduction to Security and Compliance</li> <li>DDoS Mitigation</li> <li>Penetration Testing</li> <li>KMS and CloudHSM</li> <li>Secrets Manager</li> <li>AWS Artifact</li> <li>GuardDuty</li> <li>Inspector</li> <li>AWS Config</li> <li>AWS Macie</li> <li>Security and Compliance Summary</li> </ul>

## Module Breakdown (continued)

<p><b>MODULE 15</b></p> <p><b>Machine Learning</b></p> <ul style="list-style-type: none"><li>Amazon Rekognition</li><li>Amazon Transcribe</li><li>Amazon Polly</li><li>Amazon Translate</li><li>Amazon Lex and Connect</li><li>Amazon Comprehend</li><li>Amazon SageMaker</li><li>Machine Learning Summary</li></ul>	<p><b>MODULE 16</b></p> <p><b>Advanced Identity</b></p> <ul style="list-style-type: none"><li>Amazon Cognito</li><li>Directory Services</li><li>Single Sign-On (SSO)</li><li>Advanced Identity Summary</li></ul>
<p><b>MODULE 17</b></p> <p><b>Are You Well Architected?</b></p> <ul style="list-style-type: none"><li>Are You Well Architected</li><li>Operational Excellence</li><li>Security</li><li>Reliability</li><li>Performance Efficiency</li><li>Cost Optimization</li><li>Trusted Advisor</li></ul>	<p><b>MODULE 18</b></p> <p><b>Congratulations &amp; Exam Preparation</b></p> <ul style="list-style-type: none"><li>Exam Tips &amp; Congratulations</li></ul>