

## **AWS Systems Operations:**

### **Course Content**

#### **Week 1:**

##### **Module 1: Understanding System Operations on AWS**

- Administer Resources on AWS
- Data Center vs the cloud
- High Level Overview
- Securing Your AWS Account
- Command Line Basics

##### **Module 2: Computing on AWS**

- Creating instances
- Instance Security
- Pricing
- Troubleshooting

##### ***Lab 1: Launching and troubleshooting Amazon EC2 instances***

##### **Module 3: Networking on AWS**

- Common Amazon VPC Scenarios
- Amazon VPC Peering and Direct Connect
- Amazon VPC Security Troubleshooting

##### ***Lab 2: Configuring a Virtual Private Cloud***

#### **Week 2:**

##### **Module 4: Storage and Archiving in the Cloud**

- Using Amazon Elastic Block Store
- Amazon S3, AWS Import/Export, and AWS Storage Gateway
- Amazon Glacier
- Storage Security
- Trouble Shooting
- Pricing

***Lab 3: Using storage in the Cloud; Synchronizing files with Amazon S3***

**Module 5: Monitoring in the cloud**

- Logging Basics
- Using CloudWatch and CloudWatch Logs
- Using AWS CloudTrail
- Security and Monitoring
- Troubleshooting

Week 3:

***Lab 4: Monitor EC2 System Status with CloudWatch; Auto-stop Unused Instances***

**Module 6: Managing Resource Consumption in the Cloud**

- Automating Cost Reduction
- Tagging
- CloudWatch
- Cost Explorer
- Trusted Advisor

***Lab 5: Managing Resources with Tagging; Identifying and Terminating Non-Compliant Resources***

**Module 7: Configuration in the Cloud**

- Using and Creating New AMIs
- Using Configuration Management
- Troubleshooting CM

Week 4:

**Module 8: DataBase on Cloud**

- Exploring Relation Database service
- DynamoDB
- Elastic Cache

**Lab 6: Deploy Database service on Cloud**

## **Module 9: Creating Scalable Deployments in the Cloud**

- Common Deployment Scenarios
- Redirecting Traffic with Elastic Load Balancing
- Scaling to Demand with Auto Scaling
- Routing with Amazon Route 53
- Troubleshooting Scalable Deployments

### ***Lab 7: Deploy an Auto Scaling Web Service***

### ***Course Wrap-Up***