**Master Program in AWS Cloud-DevOps**

**Month 1: AWS Cloud Fundamentals and Infrastructure**

Week 1-2: Introduction to AWS and Cloud Concepts

* Overview of AWS services
* Understanding cloud computing models
* AWS global infrastructure and regions

Week 3-4: Compute Services on AWS

* Amazon EC2 (Elastic Compute Cloud)
* AWS Lambda for serverless computing
* Auto Scaling and Load Balancing

**Month 2: AWS Storage, Databases, and Networking**

Week 1-2: Storage Services on AWS

* Amazon S3 (Simple Storage Service)
* Amazon EBS (Elastic Block Store)
* AWS Glacier for archival storage

Week 3-4: AWS Databases

* Amazon RDS (Relational Database Service)
* Amazon DynamoDB (NoSQL Database)
* Database scaling and backup strategies

Week 5-6: Networking on AWS

* Amazon VPC (Virtual Private Cloud)
* Route 53 for DNS management
* Networking best practices on AWS

**Month 3: DevOps Practices and Tools**

Week 1-2: Introduction to DevOps

* Principles and culture of DevOps
* CI/CD concepts and practices
* DevOps tools overview (e.g., Jenkins, Git)

Week 3-4: Infrastructure as Code (IaC) with AWS CloudFormation

* Basics of CloudFormation
* Creating and managing stacks
* IaC best practices

**Month 4: Advanced AWS Services, Security, and Final Project**

Week 1-2: Advanced AWS Services

* AWS ECS (Elastic Container Service)
* AWS Lambda with API Gateway
* AWS Kinesis for real-time data processing

Week 3-4: Security on AWS

* Identity and Access Management (IAM)
* AWS Key Management Service (KMS)
* AWS Security Best Practices

Week 5-6: Final Project and Exam Preparation

* Participants work on a comprehensive AWS DevOps project
* Project presentation and evaluation
* Review of key concepts and exam preparation