

Comprehensive Cloud Computing Curriculum

From Beginner to expert



CLOUD COMPUTING CURRICULUM

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INTRODUCTION TO CLOUD COMPUTING

- I. Understanding Cloud Computing Basics
- II. Importance of Cloud Computing
- III. Overview of AWS Certified Solutions Architect Associate Certification
- IV. Benefits of AWS Certification
- V. Career Opportunities in Cloud Computing

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GETTING STARTED WITH AWS

- I. Creating Your AWS Account
- II. Navigating the AWS Console
- III. Exploring the AWS Free Tier
- IV. AWS Billing and Cost Management
- V. AWS Identity and Access Management (IAM)

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AMAZON ELASTIC COMPUTE CLOUD (EC2) FUNDAMENTALS

- I. Introduction to EC2
- II. Launching EC2 Instances
- III. EC2 Instance Types and Usage
- IV. Best Practices for EC2
- V. EC2 Security Groups

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EC2 INSTANCE STORAGE

- I. Understanding EBS (Elastic Block Store)
- II. Utilizing Instance Store (Ephemeral Storage)
- III. EBS Volume Types and Use Cases
- IV. Managing EBS Volumes
- V. Data Backups and Snapshots

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HIGH AVAILABILITY AND SCALABILITY IN AWS

- I. Elastic Load Balancing (ELB)
- II. Auto Scaling Groups (ASG)
- III. Scaling Applications for High Availability
- IV. Load Balancer Configuration
- V. Monitoring and Auto Scaling Policies

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AWS DATABASE FUNDAMENTALS

- I. Introduction to AWS Databases
- II. Relational Database Service (RDS)
- III. Amazon Aurora Database
- IV. ElastiCache for Caching
- V. Database Scalability and Availability

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DNS MANAGEMENT WITH ROUTE 53

- I. Domain Name System (DNS) Basics
- II. Route 53 Features and Functionality
- III. Configuring DNS Records
- IV. Traffic Routing and Load Balancing
- V. DNS for High Availability

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ARCHITECTURAL DESIGN CONSIDERATIONS

- I. Classic Solutions Architecture Discussions
- II. Architectural Best Practices
- III. Scalable and Resilient Architectures
- IV. Security and Compliance in Design
- V. Architecting for Cost Optimization

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AMAZON SIMPLE STORAGE SERVICE (S3)

- I. Introduction to Amazon S3
- II. S3 Storage Classes and Use Cases
- III. Managing S3 Buckets and Objects
- IV. Data Backup and Archiving with S3
- V. Versioning and Lifecycle Policies

CLOUD COMPUTING CURRICULUM

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S3 SECURITY AND ACCESS CONTROL

- I. Securing S3 with Bucket Policies
- II. Access Control Lists (ACLs) in S3
- III. Identity and Access Management (IAM) for S3
- IV. Data Encryption in S3
- V. Best Practices for S3 Security

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CONTENT DELIVERY AND ACCELERATION

- I. CloudFront: Content Delivery Network (CDN)
- II. AWS Global Accelerator
- III. Distributed Content Delivery
- IV. Accelerating Application Availability
- V. Content Caching and Performance Optimization

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ADDITIONAL AWS STORAGE OPTIONS

- I. Exploring Other AWS Storage Services
- II. Data Management in AWS
- III. Storage Integration with EC2 Instances
- IV. Storage Backup and Recovery
- V. Best Storage Practices

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MESSAGING AND STREAMING SERVICES

- I. Message Queuing with Amazon SQS
- II. Publish/Subscribe Model with Amazon SNS
- III. Real-Time Streaming with Amazon Kinesis
- IV. Message Broker Services with Active MQ
- V. Data Processing and Scalability

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CONTAINERIZATION ON AWS

- I. Amazon Elastic Container Service (ECS)
- II. AWS Fargate for Serverless Containers
- III. Elastic Container Registry (ECR)
- IV. Elastic Kubernetes Service (EKS)
- V. Container Orchestration

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FINAL PROJECT

- I. Real-World AWS Project Assignment
- II. Project Planning and Scoping
- III. Implementation, Deployment, and Testing
- IV. Project Presentation and Demo

Technologies to learn



Job Roles that can be applied after completion of this course

Cloud Engineer

Site Reliability Engineer (SRE)

Software Engineer

DevOps Engineer

Cloud Administrator

Cloud Solutions Architect

Cloud Architect

Cloud Support

Cloud Technical Support Engineer

Cloud Sales Engineer

Cloud Data Enginee

Cloud Security Engineer

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Prepare for the Evaluation

Based on the evaluation criteria we provide, prepare yourself to demonstrate your skills and abilities. We're here to support you throughout this process, ensuring you're well-prepared for success.

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WHY TO CHOOSE US?



Personalized Mentorship

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