

### AWS Curriculum

S.No	Module	Module Content	Duration (Hrs )
Module 1	<b>Introduction to Cloud Computing</b>	Introduction to Cloud Computing Advantages of Cloud Computing Era Before and After Cloud Computing Cloud Services & Deployment models Cloud service providers	1
Module 2	<b>Introduction to AWS</b>	What is AWS AWS Account Creation AWS Service domains AWS Services AWS Regions and AZ's AWS Suite AWS Free Tier Starting off with AWS:(Hands-On) Billing Dashboard & Cost Explorer Setting up Billing Alarm \$ Budget Service Quota	1
Module 3	<b>Simple Storage Service - S3</b>	Basics of Storage System Storage Services provided by AWS Difference Between Object storage and Block Storage Introduction to Simple Storage Service - S3 Components of S3 Important Properties of S3 bucket Enabling and Managing Versioning on S3 bucket Managing Logging on S3 Bucket Creating Life-Cycle Management Rule S3 Hosting a static-website in S3 Cross-Region replication in S3 Transfer Accelerator in S3 Security feature of S3Encryption,Bucket Policy, Permission etc. Snowball - Types & Use Cases S3 Pricing	3

Module 4	<b>Elastic Compute Cloud - EC2</b>	<p>Basics of Virtual Servers</p> <p>Components of a Virtual Server</p> <p>Introduction to Elastic Cloud Compute - EC2</p> <p>Use cases and important features of EC2</p> <p>Introduction to AMI - Its Uses</p> <p>Introduction to Instance and its types</p> <p>Security Groups - Creation &amp; Management</p> <p>Key Pair - Why &amp; How</p> <p>Launching &amp; Connecting to Window Instance</p> <p>Launching &amp; Connecting to Linux Instance</p> <p>Setting up a web server on linux Instnace - Hosting a website</p> <p>Elastic IP Address</p> <p>Placement Group</p> <p>Instance Pricing Model</p> <p>Tenancy Models</p>	<b>3</b>
Module 5	<b>Elastic Block Storage - EBS</b>	<p>Introduction to EBS</p> <p>How EBS Works</p> <p>Snapshots</p> <p>Snapshot Restoring</p> <p>Pricing</p>	<b>1</b>
Module 6	<b>Elastic File System - EFS</b>	<p>Introduction to Elastic File System - EFS</p> <p>Configuration of EFS</p> <p>Creating and using EFS with Multiple EC2 Instances</p>	<b>0.5</b>
Module 7	<b>Elastic Load Balancer - ELB</b>	<p>Types of Load Balancer in AWS</p> <p>Use Cases of Load balancers</p> <p>Important Components of Load Balancer</p> <p>How Health-Check Works for Load Balancer</p> <p>Configuration of a load balancer and its management</p>	<b>2</b>
Module 8	<b>AutoScaling - AS</b>	<p>Use Cases of Autoscaling</p> <p>Important Components of AutoScaling</p> <p>Configuration of Autoscaling</p> <p>Launch Configuration and LB Group</p> <p>Pricing</p>	<b>1</b>

Module 9	<b>Virtual Private Cloud - VPC</b>	<p>Basics of Networking  IP Address and CIDR Block  Concept of Virtual Cloud - Private  Introduction to Virtual Private Cloud -VPC  Subnet and Route Tables  Internet Gateway and NAT  Creating and managing a NAT Instance  Access Control List - ACL  VPC Peering</p>	<b>4</b>
Module 10	<b>Route53</b>	<p>Introduction to DNS  How DNS Works  Introduction to Route53  Domain Registration in Route53  Health Checks in Route53  Routing Policies in Route53  Creating and Managing different Routing Policies</p>	<b>1.5</b>
Module 11	<b>Relational Database Service - RDS</b>	<p>Introduction to Database - Its Components  Database Services provided by AWS  Introduction to RDS  Components of RDS  DB engines provided by RDS  Snapshots and Back-up in RDS  Read Replicas in RDS  Creating and connecting to a RDS database  RDS Security  Pricing in RDS</p>	<b>2</b>
Module 12	<b>Elastic Beanstalk - EB</b>	<p>Introduction to Elastic Beanstalk I  Important Concepts in EB  Managing Environments in EB  Managing Applications in EB  EB Platforms  Getting started with EB</p>	<b>1</b>
Module 13	<b>Identity &amp; Access Management- IAM</b>	<p>Introduction to Identity &amp; Access Management  Components of IAM  Creating and Managing Users &amp; Groups  Creating and Managing IAM Policies  Roles and its use cases  Multi-Factor Authentication - [MFA]  Security Features in IAM</p>	<b>1.5</b>
Module 14	<b>Lambda</b>	<p>Important Components of Lambda  Creating simple function in Lambda  Creating and Managing triggers in Lambda  Sample Code run using Lambda</p>	<b>1</b>

Module 15	<b>API Gateway</b>	How API Gateway Works Why Should we use API Gateway Pricing in API Gateway Use Case Discussion Integration with Lambda	<b>1</b>
Module 16	<b>CloudWatch</b>	Important Components of CloudWatch Creating and Managing metrics in CloudWatch Creating and Managing Events in CloudWatch Creating and Managing Dashboards in Cloudwatch Creating and Managing Alarms in CloudWatch Creating and Managing Logs in Cloudwatch	<b>1</b>
Module 17	<b>Cloudtrail</b>	Introduction to Cloudtrail Creating and Managing trails Setting up trail for Root login Notification	<b>0.5</b>
Module 18	<b>Extra Concepts</b>	Introduction to Linux Commands Introduction to Basic Networking CIDR Calculation	<b>1</b>
Project			<b>2</b>
<b>Total count</b>	<b>18 Modules + Projects</b>		<b>30 Hours</b>