



## Academic Year: 2022-23

### Skill Oriented Course-I

S.No.	Sem & Section	Title	Date (From -to)
1.	III SEM CAI	AWS Cloud Computing Foundations	12/12/2022 to 17/12/2022

### Skill Oriented Course-II

S.No.	Sem & Section	Title	Date (From -to)
1.	IV SEM CST	AWS Academy Solutions Architect	27/02/2023 to 04/03/2023

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**Vision:** To evolve as a centre of academic and research excellence in the area of Computer Science and Engineering.

**Mission:** To utilize innovative learning methods for academic improvement.

To encourage higher studies and research to meet the futuristic requirements of Computer Science and Engineering.  
To inculcate Ethics and Human values for developing students with good character.



## **AWS-Cloud Computing Foundations**

### **Topics Covered:**

- Exercise 1.** Introduction to Cloud Computing & Account Registration in AWS
- Exercise 2.** AWS Global Architecture
- Exercise 3.** Demo on Servers, How to launch instances(Servers) in Cloud.
- Exercise 4.** AWS Security Groups
- Exercise 5.** AMIs and Volumes in AWS
- Exercise 6.** To Configure Amazon Virtual Private Cloud (VPC)
  - 6.1. To Create your own VPC
  - 6.2. To Create public subnet
  - 6.3. To Create private subnet
  - 6.4. Create an Internet gateway and attach to your VPC
  - 6.5. Create a Public Routing Table, associate subnet and add routing rules
  - 6.6. Create Private Routing Table, associate subnet and add routing rules
  - 6.7. To Connect to Public subnet instance
  - 6.8. To Connect to Private subnet instance
  - 6.9. To Connect linux instance in private subnet
  - 6.10. To Connect linux instance in public subnet
- Exercise 7.** VPC Peering
- Exercise 8.** NAT Gateway
- Exercise 9.** To Assign Elastic IP address
- Exercise 10.** Application Deployment in Cloud using EC2
- Exercise 11.** Load balancer concepts on Cloud
- Exercise 12.** Storage Concepts
  - 12.1. EC2 Store
    - 12.1.1. Instance Store
    - 12.1.2. EBS(Elastic Block Store)
  - 12.2. S3(Simple Storage Service)
  - 12.3. NFS/EFS
  - 12.4. Glacier
- Exercise 13.** Static Website Hosting using WINSOFT-Tool
- Exercise 14.** Database creation using RDS



## [AWS Academy Solutions Architect](#)

### **Topics Covered:**

- Module 1** - Welcome to AWS Academy Cloud Architecting
- Module 2** - Introducing Cloud Architecting
- Module 3** - Adding a Storage Layer
- Module 4** - Adding a Compute Layer
- Module 5** - Adding a Database Layer
- Module 6** - Creating a Networking Environment
- Module 7** - Connecting Networks
- Module 8** - Securing User and Application Access
- Module 9** - Implementing Elasticity, High Availability and Monitoring
- Module 10** - Automating Your Architecture
- Module 11** - Caching Content
- Module 12** - Building Decoupled Architectures
- Module 13** - Building Microservices and Serverless Architectures
- Module 14** - Planning for Disaster
- Module 15** - Bridging to Certification