



Academic Year: 2021-22
Skill Oriented Course-I

| S.No. | Sem & Section | Title | Date (From -to) |
|-------|--------------------------------|------------------------------|--------------------------------|
| 1. | III SEM CSE-D | AWS-Cloud Computing | 24/01/2022 to 29/01/2022 |
| 2. | III SEM Lateral Entry Students | Python Programming | 24/01/2022 to 29/01/2022 |
| 3. | III SEM CSE-A&B | AWS-Cloud Computing | 17/01/2022 to 22/01/2022 |
| 4. | III SEM CSE-C | Web Development Using Django | 17/01/2022 to 22/01/2022 |

Skill Oriented Course-II

| S.No. | Sem & Section | Title | Date (From -to) |
|-------|-------------------|------------------------------|--------------------------------|
| 1. | IV SEM CSE-C | AWS-Cloud Computing | 20/06/2022 to 25/06/2022 |
| 2. | IV SEM CSE-A,B,&D | SDG START-UP WEB DEVELOPMENT | 02/05/2022 to 07/05/2022 |

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.



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| 7. | III SEM CSE-A&B | AWS-Cloud Computing | 17/01/2022 to 22/01/2022 |
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Syllabus Details

AWS-Cloud Computing

Course Outcomes: After Successful completion of the Course, the student will be able to:

| | |
|--|------|
| CO1: Discuss architecture of AWS. | [K2] |
| CO2: Illustrate VPC. | [K3] |
| CO3: Describe storage concepts. | [K2] |
| CO4: explain database connectivity. | [K2] |

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



Python Programming

Course Outcomes: After Successful completion of the Course, the student will be able to:

| | |
|--|------|
| CO1: Discuss fundamentals of python. | [K2] |
| CO2: Describe about control structures in python. | [K2] |
| CO3: illustrate functions implementation. | [K3] |
| CO4: Discuss file handling. | [K2] |

Topics Covered:

- Introduction to Python
- Control Structures
- Structured Data Types
- Functions & modules
- Files & Exception Handling



Web Development Using Django

Course Outcomes: After Successful completion of the Course, the student will be able to:

| | |
|---|------|
| CO1: Explain oops concepts. | [K2] |
| CO2: Discuss Django. | [K2] |
| CO3: Describe database connectivity. | [K2] |

Topics Covered:

1. Introduction to Python

- a. Object-Oriented Programming(Classes,Objects)
- b. Constructors
- c. Inheritance
- d. Python Packages and modules using oop's.

2. Django :

- a. Introduction to Django
- b. MVC, MVT,Architecture of Django
- c. Django Installation
3. Project Creation, APP creation and use of admin app
4. URL mapping(creation),Dynamic URL mapping,views
5. Interface between controller(urls.py & views.py) files
6. Http Request and Responses.
7. Django Templates
8. Providing an interface between controller and templates
9. Static file handling
10. Data rendering from HTML to views and then views to HTML with example.
11. Model creation
12. Migrations, ORM
13. Model Queries(Django shell)
14. Super user Creation(admin part)
15. Roles of the superuser.
16. Crud operations, Messages generation
17. Form Validations
18. Database Connectivity and Database Migrations with MYSQL
19. Mail Sending
20. File Uploading
21. User Registration & User Authentication



Skill Oriented Course-II

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SDG START-UP WEB DEVELOPMENT

Course Outcomes: After Successful completion of the Course, the student will be able to:

| | |
|--|------|
| CO1: Explain SDG Goals. | [K2] |
| CO2: Develop static and Dynamic Websites. | [K3] |
| CO3: Demonstrate Backing up files. | [K3] |

Topics Covered:

1. Sustainable Development Goals, Design Thinking & Activities on Design Thinking
2. Static Website Development
3. Workshop Starts on Static Website development
4. Dynamic website development
5. Workshop on Dynamic website development
6. Creating Projects