



Course Name: Cloud Programming using Web Services

(UG/PG): PG

Number of Credits: 03

Level: 4

Learning Objective(s):

On successful completion of the course the students should have:

1. Learn the purpose of how to do the programming in cloud computing
2. Learn to design the architecture of cloud computing.
3. Understand the knowledge discovery process.

Pedagogy:

Lectures
class work
Class room discussion
Case study
Hands on Exercise

Pre-learning:

Good knowledge of cloud environment in terms of customization.

Course Outline

S.No	Topic	Hours
1	<ul style="list-style-type: none">• Cloud Computing• Software-as-a-service: SaaS• Platform-as-a-service: PaaS• Hardware-as-a-service: HaaS• Infrastructure-as-a-service: IaaS	9
2	<ul style="list-style-type: none">• Google Cloud Infrastructure• Google File System• Search engine• MapReduce	8
3	<ul style="list-style-type: none">• Grid Computing• Amazon Web Services• REST APIs• SOAP API• Query API• User Authentication	8

4	<ul style="list-style-type: none"> • Simple Storage Service – S3 • Overview • Buckets • Objects • ACL • Logging • Signed URI 	8
5	<ul style="list-style-type: none"> • S3 Applications • Elastic Cloud Compute - EC2 • Overview • Keypairs • Network Types <ul style="list-style-type: none"> ▪ LAN ▪ Gateways and Router ▪ IP Classes and Subnets ▪ CIDR ▪ Utilities • Instances Management • Image Management • Security groups • Connecting to the Cloud • OpenSSH Keys <ul style="list-style-type: none"> • Tunneling / Port Forwarding 	12
	Total	45

Books Recommended