

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH



LESSON PLAN Session-2024-2025

Semester: 6th Discipline: CSE Engg.

Subject: cloud computing

Name of the Teaching Faculty: P. K. Satapathy

Subject: cloud computing No. of Days/per week class allotted : 04
 Semester From Date : 4/2/25 To Date: 17/5/25 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
1st (Topic-1)	1st	Historical dev and vision of CC
	2nd	Reference model and characteristics of CC
	3rd	CC environment and service requirements
	4th	Dynamic Infrastructure and applications
2nd	1st	cloud adoption
(Topic-2)	2nd	cloud computing Architecture
	3rd	Reference model
	4th	Types of clouds
3rd	1st	cloud Interoperability
	2nd	Standards
	3rd	Interoperability use cases
	4th	Role of standards.


 Signature of the Faculty

Subject: cloud computing No. of Days/per week class allotted : 04
 Semester From Date : 4/2/25 To Date: 17/5/25 No. of Weeks : 15

Week	Class Day	Theory / Practical Topics
4th	1st	Comparison of cloud
(Topic 3)	2nd	scalability and fault tolerance
	3rd	cloud solutions
	4th	cloud ecosystem
5th	1st	cloud process Business management
	2nd	Portability and Interoperability
	3rd	cloud service mgmt and offerings
	4th	Testing under control
6th	1st	cloud service controls and VDI
topic 4	2nd	Virtualised Architecture
	3rd	Data centre, Resilience, agility
	4th	Cisco DCNA


 Signature of the Faculty

Subject: cloud computing No. of Days/per week class allotted : 04
 Semester From Date : 1/2/25 To Date: 17/5/25 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
7th	1st	storage
	2nd	Provisioning
	3rd	Asset mgmt and concept of map reduce
	4th	cloud governance and cloud balancing regarding load
8th	1st	High availability and disaster recovery
topic 5	2nd	Virtualization and N/w virtualization
	3rd	Desktop as a service
	4th	Desktop and application Virtualization
9th	1st	local desktop virtualization
	2nd	Virtualization benefits and Server Virtualization
	3rd	block and file storage Virtualization
	4th	VMM and its infrastructure requirements


 Signature of the Faculty

Subject: cloud computing No. of Days/per week class allotted : 04

Semester From Date : 4/2/25 To Date: 17/5/25 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
10 th	1 st	VLAN and VSPAN
topic-6	2 nd	Need of cloud security
	3 rd	cloud security fundamentals
	4 th	cloud security services
11 th	1 st	Design Requirement
	2 nd	Design principles
	3 rd	secure cloud s/w requirements
	4 th	policy Implementation
12 th	1 st	Security challenges
topic-7	2 nd	Architectural Consideration and info classification
	3 rd	VPN, Public key and Encryption key management.
	4 th	Digital certificates, key management & memory cards


Signature of the Faculty

Subject: cloud computing No. of Days/per week class allotted : 04

Semester From Date : 4/2/25 To Date: 17/5/25 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
13 th	1 st	Implementing Identity management
	2 nd	Control and Autonomic system
topic-8	3 rd	cloud Information security vendors
	4 th	cloud federation, characterization
14 th	1 st	cloud federation stack
	2 nd	Third party cloud service
	3 rd	case study
topic-9	4 th	Basic concept and Hadoop.
15 th	1 st	Hadoop requirement
	2 nd	Data source
	3 rd	Data storage and Analysis
	4 th	Comparison with other system


Signature of the Faculty