



Syllabus

Cloud Computing

Duration: 30 hours

Module 1: Introduction to Cloud Computing: Definition of Cloud – Cloud Characteristics- Evolution of Cloud Computing

Module 2: Cloud Deployment Models- Private, Public, Hybrid and Community Cloud, Cloud Service Models- SaaS (Software as a Service), PaaS (Platform as a Service), IaaS (Infrastructure as a Service)

Module 3: Cloud Computing Architecture – Introduction, Grid Framework and Architecture, Challenges of Grid Computing, Key Design Aspects of Cloud Architecture on Basis of Load Balancing, On the Basis of Disk Provisioning, On the basis of Storage Management, On the Basis of Service Relocation

Module 4: Cloud Data Centers- Cloud Data Center Core Elements, Cloud Computing Applications, Cloud Service Providers

Module 5: Virtualization Introduction- Features -Advantages of Virtualization- V Migration- Virtualization Technology At Network, Virtualization Technology at Desktop and Application



Schedule

Duration:30 hours			
Session	Content	Time	Date
1.	Introduction to Cloud Computing: Definition of Cloud	3:00-4:00	7-3-22
2.	Cloud Characteristics	3:00-4:00	9-3-22
3.	Evolution of Cloud Computing	3:00-4:00	14-3-22
4.	Cloud Deployment Models	3:00-4:00	16-3-22
5.	Cloud Deployment Models- Private	3:00-4:00	21-3-22
6.	Cloud Deployment Models- Public	3:00-4:00	23-3-22
7.	Cloud Deployment Models- Hybrid	3:00-4:00	28-3-22
8.	Cloud Deployment Models- Community	3:00-4:00	30-3-22
9.	Cloud Service Models	3:00-4:00	4-4-22
10.	SAAS	3:00-4:00	6-4-22
11.	PAAS	3:00-4:00	11-4-22
12.	IAAS	3:00-4:00	13-4-22
13.	Cloud Computing Architecture – Introduction	3:00-4:00	18-4-22
14.	Grid Framework and Architecture	3:00-4:00	20-4-22
15.	Challenges of Grid Computing	3:00-4:00	25-4-22
16.	Key Design Aspects of Cloud Architecture on Basis of Load Balancing.	3:00-4:00	27-4-22
17.	On the Basis of Disk Provisioning, On the basis of Storage Management	3:00-4:00	2-5-22
18.	On the Basis of Service Relocation	3:00-4:00	4-5-22
19.	Cloud Data Centers	3:00-4:00	9-5-22
20.	Cloud Data Center Core Elements	3:00-4:00	11-5-22



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21.	Cloud Computing Applications	3:00-4:00	16-5-22
22.	Cloud Service Providers	3:00-4:00	18-5-22
23.	Virtualization Introduction	3:00-4:00	23-5-22
24.	Features -Advantages of Virtualization	3:00-4:00	25-5-22
25.	Migration-Virtualization Technology At Network	3:00-4:00	30-5-22
26.	Virtualization Technology at Desktop and Application	3:00-4:00	1-6-22
27.	Cloud Data Centers	3:00-4:00	6-6-22
28.	Cloud Data Center Core Elements	3:00-4:00	8-6-22
29.	Cloud Computing Applications	3:00-4:00	13-6-22
30.	Cloud Service Providers	3:00-4:00	15-6-22



	Report
Name of Activity	Cloud Computing
Date	7 March 2022 to 15 June 2022
Venue	BCA Classroom
Organized by	Computer Applications Department
Resource person	Ms. Nisha Bansal , Assistant Professor, MIMT
Beneficiaries	BCA III year (students)
Cordinator	Mr. Himanshu Rastogi , Assistant Professor, MIMT
Objective	The objective of this course is to provide comprehensive and in-depth knowledge of Cloud Computing concepts, technologies, architecture and applications by introducing and researching state-of-the-art in Cloud Computing fundamental issues, technologies, applications and implementations.
Content	<p>With the initiative of IQAC, Mangalmai Institute of Management and Technology organized a add on certification course on “Cloud Computing”. Cloud computing refers to on-demand availability of computer system resources, especially data storage.</p> <p>Day1: The session started with the introduction of Cloud computing..</p> <p>Day 2: In this session, Students learnt the characterstics of cloud.</p> <p>Day 3: In this session, the resource person discuss the evolution of Cloud Computing.</p> <p>Day 4: Introduction of Cloud Deployment model takes place.</p> <p>Day 5: In this session, Private model of cloud deployment was delivered by the resource person.</p> <p>Day 6: The session was on second model of Cloud deployment i.e.Public.The student came to learnt the public deployment that supports all users who want to make use of a computing resource, such as hardware (OS, CPU, memory, storage) or software (application server, database) on a subscription basis.</p> <p>Day 7: This session was on the third type of cloud model.i.e Hybrid.</p>



	<p>Day 8: In this session, the last model was delivered by the resource person. The last model is Community cloud model.</p> <p>Day 9: In this session the cloud service Models.</p> <p>Day 10: This session discussed about the SAAS service. Software As A Service (SAAS) allows users to run existing online applications and it is a model software that is deployed as a hosting service and is accessed over Output Rephrased/Re-written Text the internet or software delivery model during which software and its associated data are hosted centrally and accessed using their client, usually an online browser over the web.</p> <p>Day 11: In this session, resource person discussed about the PAAS service. The student came to know about Platform As A Service (PAAS) is a cloud delivery model for applications composed of services managed by a third party. It provides elastic scaling of your application which allows developers to build applications and services over the internet and the deployment models include public, private and hybrid.</p> <p>Day 12: The resource persons discussed with students about the IAAS service. Infrastructure As A Service (IAAS) is means of delivering computing infrastructure as on-demand services. It is one of the three fundamental cloud service models. The user purchases servers, software data center space, or network equipment and rent those resources through a fully outsourced, on-demand service model. It allows dynamic scaling and the resources are distributed as a service. It generally includes multiple-user on a single piece of hardware.</p> <p>Day 13: The introduction of cloud computing architecture takes place.</p> <p>Day 14: Grid Framework and architecture was delivered in the classroom.</p> <p>Day 15: Challenges of Grid computing was learnt by the student.</p> <p>Day 16: The key design aspects of cloud architecture on the basis of load balancing taught.</p> <p>Day 17: In this session, Students learnt on the basis of Disk</p>
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	<p>Provisioning, On the basis of storage management.</p> <p>Day 18: In this session, the resource person discuss on the basis of Service Relocation.</p> <p>Day 19: Cloud Data Centers taught in the classroom.</p> <p>Day 20: In this session, Core Elements of Cloud Data Centre was learnt by the students.</p> <p>Day 21: Cloud Computing application was discussed by the resource person.</p> <p>Day 22: This session was on the Cloud Service Providers.</p> <p>Day 23: In this session, Virtualization was introduced</p> <p>Day 24: Features and Advantages of virtualization was discussed.</p> <p>Day 25: This session was about the migration virtualization Technology At Network.</p> <p>Day 26: The resource person taught about the virtualization technology at Desktop and Application.</p> <p>Day 27: Cloud data centers were introduced.</p> <p>Day 28: The introduction of cloud computing data center elements takes place.</p> <p>Day 29: Cloud computing Applications taught.</p> <p>Day 30: The course ends with the topic Cloud Service Providers.</p>
Outcome of Activity	<p>Students understood the necessary theoretical background for computing and storage clouds environments. They came to know about various methodologies and technologies for the development of applications that can be deployed and offered through cloud computing environments. The students were able to realize cloud infrastructures by using IaaS software, while also developing cloud applications by utilizing PaaS software.</p>



List of Beneficiary
BCA-VI Sem

S.No.	Roll No.	Student Name
1	R190992106024	KARTIKE KUMAR
2	R190992106066	VAQUAAR
3	R190992106008	ASHWIN KUMAR SINGH
4	R190992106061	SUBHAM
5	R190992106020	JASMINE
6	R190992106023	KARAN
7	R190992106054	SHANI RAI
8	R190992106048	RISHABH JAIN
9	R190992106052	SAURAV KASHYAP
10	R190992106037	MUKESH SINGH



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Resource Person Profile:

Name: Ms. Nisha Bansal , Assistant Professor


Organization: MIMT, Greater Noida

Qualification: MCA, M.Phil

Area of Expertise: Cloud Computing





Certificate Template:



MANGALMAY

INSTITUTE OF MANAGEMENT TECHNOLOGY

Gr. NOIDA

Certificate No: BCA/21-22/SP601/001 Date:- 23rd June, 22

CERTIFICATE OF COURSE COMPELITION

This is to certify that


----- Kautilya Kumar -----

Student of BCA, Batch (2021-22) has successfully completed 30 Hours


Specialization Course on Introduction to cloud computing

from 07 mar, 22 to 15 June, 22 with Grade B+


Grading	A+	A	B+	B	Fail
System	13-15	10-12	7-9	4-6	0-3



Course Coordinator



Head of the Department



Chairman/Vice Chairman