

# **INSTITUTE OF AERONAUTICAL ENGINEERING**

(Autonomous) Dundigal - 500 043, Hyderabad, Telangana

# **COURSE CONTENT**

CLOUD COMPUTING								
III Semester: MBA								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
CMBD40	Elective	L	Т	Р	С	CIA	SEE	Total
		4	-	-	4	40	60	100
Contact Classes: 45	Tutorial Classes: Nil	Р	ractica	l Class	ses: Nil	Total Classes: 45		
Prerequisite: Management of Information Systems								

# I. COURSE OVERVIEW:

In today's rapidly evolving business landscape, cloud computing has emerged as a transformative technology that enables organizations to streamline operations, enhance scalability, and drive innovation. The "Cloud Computing for MBA Students" course is designed to provide MBA students with a comprehensive understanding of cloud computing concepts, strategies, and applications. This course will equip students with the knowledge and skills necessary to harness the power of cloud computing in various business contexts.

# **II. COURSES OBJECTIVES:**

#### The students will try to learn:

- I. The basics of cloud computing for business management.
- II. The benefits of cloud storage and its applications, usage by managers.
- III. Cloud computing driven importance in real time systems.

#### **III. COURSE OUTCOMES:**

#### At the end of the course students should be able to:

- CO1 Recall the fundamental concepts of cloud computing, including virtualization, resource provisioning, and service models (IaaS, PaaS, SaaS).
- CO2 Explain the strategic advantages and challenges of integrating cloud computing into diverse business models and industries.
- CO3 Understand the role of cloud-based collaboration tools in supporting effective communication and teamwork.
- CO4 Apply cloud computing concepts to solve business challenges, enhance operations, and foster innovation.
- CO5 Apply models to specific business needs and evaluate their alignment with organizational goals.
- CO6 Analyze security risks in cloud computing and formulate strategies to ensure data privacy, protection, and regulatory compliance.

### **IV.COURSE CONTENT:**

#### MODULE - I: INTRODUCTION TO CLOUD COMPUTING (08)

Evolution -Cloud Computing, Hardware, Internet and Software, Virtualization. Cloud service Attributes: Access to the cloud, Cloud Hosting, Information technology support. Characteristics of Cloud Computing: Rapid Elasticity, Pay per use, Independent Resource Pooling, Network Access, Web Services on Cloud.

#### **MODULE - II: CLOUD SERVICES APPLICATIONS (10)**

Cloud Delivery Models- Infrastructure-as-a-Service, Platform-as-a-Service, Software-as-a-Service. Cloud Categories: Public Cloud, Private Cloud, Hybrid Cloud, Community Cloud. Applications – Online Planning and Task Management –Event Management – CRM.Cloud Service Development tools - Word Processing, Databases, Storing and File Sharing on Cloud.

#### MODULE - III: CLOUD COMPUTING FOR MANAGERS (09)

Centralizing Email Communications – Collaborating on Schedules - To-Do Lists, Contact Lists. Online Community development, Online collaboration tools for Projects, Cloud Computing for Business

#### MODULE - IV: CLOUD MANAGEMENT (10)

Privacy and its relation to Cloud-based Information Systems. Security in the Cloud: Data Security and Control, Provider Loss, Subpoenaed Data, Lack of Provider Security, Encryption. Common Standards in the Cloud, End-User Access to the Cloud Computing, Legal and Ethical dimensions, Cloud Pricing Models.

#### MODULE - V: VIRTUAL OFFICE MANAGEMENT (08)

Web-based communication tools, Web Mail Services, Web Conference Tools, Social Networks and Groupware, collaborating via blogs and Wikis, IBM, Amazon Ec2, Google Apps for Business.

#### V.TEXT BOOKS:

- 1. Rastogi Surbhi, "Cloud Simplified", BPB Publication, 2021.
- 2. John R.Vacca, "Cloud Computing Security foundations and challenges", CRC Press, Nov, 2020.
- Frederic Magoules, Jie Pan, and Fei Teng, "Cloud Computing Data-Intensive Computing and Scheduling", Crc Press, 1<sup>st</sup> Edition 2018.

#### **VI. REFERENCE BOOKS:**

- a. Igor Fyanberg, Hui-LanLu, Dorskuler, "Cloud Computing business Trends and Technologies", Wiley Publishers, 2016.
- Ignor Faynberg, Hui-Lan Li, Dor Skuler, "Cloud Computing", Wiley-Blackwell, 1st Edition, Dec 2015.

#### VII. Web References:

- 1. https://www.pdfdrive.com/cloud-security-a-comprehensive-guide-to-secure-cloud-computing-e16098716.html
- 2. https://www.pdfdrive.com/secure-cloud-computing-e26598533.html

#### VIII. E-Text Books:

- 1. http://www.e-booksdirectory.com/details.php?ebook=10166
- 2. http://www.e-booksdirectory.com/details.php?ebook=7400re