

Introduction to Cloud Computing (Short Term Course)

Tentative Outline

Lecture 1 (2 hrs) 30th September, 2023 Timing: 6 pm to 8 pm

Introduction of Cloud

- Evolution
- Definition
- Characteristics
- How these characteristics are useful to industries
- Types of Cloud
- Architecture

Lecture 2 (2 hrs) 1st Oct, 2023 Timing: 10 am to 12 pm

Service and Data Management in Cloud

- Resource Abstraction and Workloads
- Need of Resource Utilization
 - Schedulers
 - Cloud Virtualization
 - Virtual Machines
- Load Management
- Storage Access Protocol

Integration of Cloud with IoT

- Basics of IoT
- Networking technologies

Lecture 3 (2 hrs) 7th Oct, 2023 Timing: 6 pm to 8 pm

Demonstration on cloud computing

Lecture 4 (2 hrs) 8th Oct, 2023 Timing: 10 am to 12 pm

Cloud Orchestration and Kubernetes

- Types of cloud orchestration and their features
- Kubernetes
- Demonstration on Kubernetes

Lecture 4 (2 hrs) 14th Oct, 2023 Timing: 6 pm to 8 pm

Data analytics in cloud computing

- Overview of AI and ML
- Introduction to Big Data Analytics
- Hands-on Tutorial on data acquisition and preprocessing.

- AI and ML application to cloud computing

Lecture 6 (2 hrs) 15th Oct, 2023 Timing: 10 am to 12 pm

- Demonstration on Data Analytics
- Demonstration on Networking Technologies