

UTKALMANI GOPABANDHU INSTITUTE OF
ENGINEERING, ROURKELA



LESSON PLAN

SESSION: 2023-2024

DEPARTMENT OF ELECTRONICS AND
TELECOMMUNICATION ENGINEERING

SUBJECT CODE: Th.2

**NAME OF THE SUBJECT: DATA COMMUNICATION AND
COMPUTER NETWORK**

BRANCH: ELECTRONICS & TELECOMMUNICATION

SEMESTER: DIPLOMA 4TH SEM

NUMBER OF CLASSES ALLOTTED PER WEEK: 4

**TOTAL PERIODS ALLOTTED TO THE SUBJECT ACCORDING TO
SCTEVT: 60**

NAME OF THE FACULTY: MANINI MONALISA PRADHAN

UTKALMANI GOPABANDHU INSTITUTE OF ENGINEERING, ROURKELA



LESSON PLAN

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SUBJECT CODE	Th.2
NAME:	DATA COMMUNICATION AND COMPUTER NETWORK
BRANCH:	ELECTRONICS & TELECOMMUNICATION
SEMESTER:	DIPLOMA 4th SEM
PERIODS PER WEEK:	4
NAME OF THE FACULTY:	MANINI MONALISA PRADHAN
NO OF CLASSES ALLOTTED PER WEEK:	4(16/01/2024 to 26/04/2024)

Week/Date	Lecture	Topic to be covered
1 st week	1 st	Data Communication Introduction
	2 nd	Types of data communication
	3 rd	Networks
	4 th	Different types of Networks
2 nd week	1 st	Protocol
	2 nd	Architecture
	3 rd	Standards, OSI
	4 th	TCP/IP
3 rd week	1 st	Data transmission Concepts
	2 nd	Data transmission Terminology
	3 rd	Analog Data transmission
	4 th	Digital Data transmission

UTKALMANI GOPABANDHU INSTITUTE OF ENGINEERING, ROURKELA



DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SUBJECT CODE	Th.2
NAME:	DATA COMMUNICATION AND COMPUTER NETWORK
BRANCH:	ELECTRONICS & TELECOMMUNICATION
SEMESTER:	DIPLOMA 4th SEM
PERIODS PER WEEK:	4
NAME OF THE FACULTY:	MANINI MONALISA PRADHAN
NO OF CLASSES ALLOTTED PER WEEK:	4(16/01/2024 to 26/04/2024)

Week/Date	Lecture	Topic to be covered
4 th week	1 st	Transmission impairments
	2 nd	Channel capacity
	3 rd	Transmission media
	4 th	Guided Transmission
		Wireless Transmission
5 th week	1 st	Data Encoding
	2 nd	Digital data digital signal
	3 rd	Digital data digital signal continues
	4 th	Digital data analog signal
6 th week	1 st	Digital data analog signal continues
	2 nd	Analog data digital signal
	3 rd	Analog data digital signal
	4 th	Analog data analog signal

UTKALMANI GOPABANDHU INSTITUTE OF ENGINEERING, ROURKELA



DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SUBJECT CODE	Th.2
NAME:	DATA COMMUNICATION AND COMPUTER NETWORK
BRANCH:	ELECTRONICS & TELECOMMUNICATION
SEMESTER:	DIPLOMA 4th SEM
PERIODS PER WEEK:	4
NAME OF THE FACULTY:	MANINI MONALISA PRADHAN
NO OF CLASSES ALLOTTED PER WEEK:	4(16/01/2024 to 26/04/2024)

Week/Date	Lecture	Topic to be covered
7 th week	1 st	Asynchronous and synchronous Transmission
	2 nd	Error Detection
	3 rd	Basic idea of Error control
	4 th	Error Detection
8 th week	1 st	Line Configuration
	2 nd	Flow control
	3 rd	Error Control
	4 th	Multiplexing
9 th week	1 st	FDM Synchronous TDM
	2 nd	Statistical TDM
	3 rd	Circuit Switching Network
	4 th	Packet Switching Principles
		X.25

UTKALMANI GOPABANDHU INSTITUTE OF ENGINEERING, ROURKELA



DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SUBJECT CODE	Th.2
NAME:	DATA COMMUNICATION AND COMPUTER NETWORK
BRANCH:	ELECTRONICS & TELECOMMUNICATION
SEMESTER:	DIPLOMA 4th SEM
PERIODS PER WEEK:	4
NAME OF THE FACULTY:	MANINI MONALISA PRADHAN
NO OF CLASSES ALLOTTED PER WEEK:	4(16/01/2024 to 26/04/2024)

Week/Date	Lecture	Topic to be covered
10 th week	1 st	Routing in Packet Switching
	2 nd	Congestion
	3 rd	Effects of congestion
	4 th	Congestion control
11 th week	1 st	Traffic Management
	2 nd	Congestion Control in Packet Switching Network
	3 rd	Congestion Control in Packet Switching Network continue
	4 th	Topology
12 th week	1 st	Transmission media
	2 nd	LAN Protocol architecture
	3 rd	Medium access control
	4 th	Bridges
13 th week	1 st	Hub
	2 nd	Switches
	3 rd	Ethernet
	4 th	Fiber Channel
14 th week	1 st	Wireless LAN Technology
	2 nd	TCP/IP Protocol
	3 rd	TCP/IP Protocol continue
	4 th	Basic Protocol function
15 th Week	1 st	Basic Protocol function continue
	2 nd	Principle of Internetworking
		Principle of Internetworking continue
		Internet Protocol operation
		Internet Protocol

