

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Name of the Lab : COMMUNICATION LAB

OBJECTIVES:

- To provide exposure to the students with hands on experience and gives students deep knowledge in digital communication systems at the practical level.
- This lab focuses the fundamental concepts on TDM, Sampling, AM & FM modulation and Demodulation Pulse code modulation & DM, digital modulation techniques, source coding techniques and Error-control coding techniques.
- The student should be made to: Understand the working principle of optical sources, detector, and fibers. Develop understanding of simple optical communication link. ... Understand and capture an experimental approach to digital wireless communication.

OUTCOMES:

Upon the completion of this course the students will be able to

- Simulate & validate the various functional modules of a communication system
- Demonstrate their knowledge in base band signalling schemes through implementation of digital modulation schemes
- Apply various channel coding schemes & demonstrate their capabilities towards the improvement of the noise performance of communication system
- Analyse the performance of simple optical link by measurement of losses and analysing the mode characteristics of fiber.
- Analyse the Eye Pattern, Pulse broadening of optical fiber and the impact on BER
- Estimate the Wireless Channel Characteristics and Analyse the performance of Wireless Communication System
- Understand the intricacies in Microwave System

Estd - 2001