

ANALOG INTEGRATED CIRCUITS LABORATORY

Laboratory Description

The course enables the student to understand and address the challenges as a system designer. Today, there are several manufacturers offering large number of integrated circuits keeping in mind the diverse requirements for various applications. This course helps the students learn that as a system designer how they would reason out the right integrated circuit for the right application and also take decisions on how the system level cost or power or performance can be optimized and perform tradeoffs of various design parameters.

Analog integrated circuit design is used for designing operational amplifiers, linear regulators, oscillators, active filters, and phase locked loops. The semiconductor parameters such as power dissipation, gain, and resistance are more concerned in the designing of analog integrated circuit.

The goal of the Laboratory is to develop the students' ability to design and conduct experiments, analyze and interpret data, ability to design a system which meets the desired specifications, ability to identify, formulate, and solve engineering problems, ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

Lab Facilities

- Analog Integrated Circuits Lab is well equipped with
- Cathode Ray Oscilloscope (CRO)
- Digital Storage Oscilloscope (DSO)
- Mixed Oscilloscope
- Function Generator (FG / AFO)
- Regulated Power Supply (RPS)
- Projector with screen

Utilization

This lab is utilized for conducting the following course(s):

- 10211EC301 Analog Integrated Circuit Lab
- 10211EC302 Digital Electronics Lab
- 10211EC304 Microprocessor and Microcontroller Lab
- 10211EC305 Communication Lab