INFRASTRUCTURE & LABORATORIES

Testing and Measuring instruments like CROs, Signal Generators, 100 MHz mixed digital signal oscilloscope, Digital IC Trainers, Analog and Digital Communication Engineering Laboratory Trainers, DSP Kits, Fiber Optic kits, Micro Controller kits, Microwave Test Benches, and Software Packages like Matlab, PSpice and ORCAD, Multisim, Embedded System Design (TASKING), Dials and other EDA tools. A department library, with more than 100 books along with lecture notes, is available for the benefit of the students and the faculty.

1. Electronic Devices and Circuits Laboratory
To analyze simple diode circuits and comprehend the practical significance of biasing circuits and stability factor.
To know the VI characteristics of special high power devices and understand the behavior of amplifier circuits at both low and high frequencies.

2. System Design Using IC Laboratory
To test the applications of Operational Amplifier IC
To test Wave Shaping Circuits and Data Converters using Op AMP IC 741
To design circuits with analog ICs.

3.Network and Transmission Lines Laboratory
To learn the principles, operation, performance of various Transmission lines
To understand the concept of impedance matching
To know the characteristics of Attenuators and Equalizers.

4. Analog and Digital Communication Laboratory
To construct and test analog and digital modems.
To practically test the working of TDM.
To test and understand the need for pre-emphasis and de-emphasis.

5. Microprocessor and Microcontroller Laboratory
To practically understand assembly language programming.
To perform system design using Microprocessors and Microcontrollers.
To study various interface standards.

6. Fiber Optics and Microwave Engineering Laboratory
To learn the principles, operation, performance and applications of various microwave
 tubes and semiconductor devices.
To understand the concept of S-parameters and characterize Microwave Passive devices
 through S-matrix.
To introduce the techniques of Microwave measurement.
To understand light propagation, signal degradation in optical fibers and to study the
operation of different optical sources and detector.
To design an optical fiber link and study the principles of WDM and optical networks.

7. Digital Signal Processing Laboratory

To introduce the advantages of digital signal processing.
To introduce the theory and applications of IIR and FIR filters.
To impart knowledge on the various types of errors that affect signals during digital signal processing.
To introduce the concepts of power spectral density estimation for random signals.
To understand the concepts and applications of multi-rate sampling.
To introduce the architecture of DSP processors

8. Embedded System Laboratory

To enable the students to program, simulate and test the 8085, 8051, PIC 18 and ARM processor based circuits and their interfaces
To enable the students to program various devices using, KIEL , MPLAB software
To provide a platform for the students to do multidisciplinary projects
To facilitate the conduct of short term programs.