

## **Laboratories of the Department**

### **• Basic Electronics Laboratory**

#### **Major Equipments**

- Cathode Ray Oscilloscope
- Dual regulated power supply
- Function generator
- Bread board for analog and digital experiment
- Digital multimeter
- Bread board, Digital and Analog IC tester, other basic components like ICs, soldering iron, multimeter, function generator, power supply etc
- PCB Software for Chemical Commissioning on LPKF Machine
- Electronic Workbench

### **• Advance Electronics Laboratory**

#### **Major Equipments**

- 8085 kits and its interfacing modules
- 8086 kits and its interfacing modules
- Computers with internet connectivity and other software.
- Virtual System Modelling (VSM Software)
- ARM processor development boards with complier
- PIC Microcontroller boards with interfacing modules and Flow Code software
- 8051 Development boards with Micro-C compiler
- AVR Microcontroller development boards with Flow Code software.
- Bread board, Digital and Analog IC tester, other basic components like ICs, soldering iron, multimeter, function generator, power supply, CRO etc

### **• VLSI Laboratory**

#### **Major Equipments**

- High end PC-workstation server
- High-performance blade server (IBM)
- Cisco Ethernet switch
- Spartan-3E kits
- Virtex-2PRO
- Virtex-5

- VDEC boards
- DIO5
- AIO1

#### **EDA tools available**

- Silvaco TCAD
- Synopsys TCAD Sentaurus bundle
- Cadence tools bundle.
- Synopsys SOC tools bundle
- Mentor Graphics bundle
- Xilinx software

#### **Software**

- Cadence
- Synopsis
- Mentor graphics
- Coware
- Magma
- ComSim
- Silvaco
- Active HDL
- AMPL C-PLEX System 10.2
- MEMS Pro Complete VLSI Design System

### **• Computer Architecture Lab**

#### **Major Equipments**

- Digital signal processing Kit(With PS)
- DSP start-up Kit (DSK) Taxeas TMS320 C6711
- DSP start-up Kit (DSK) Taxeas TMS320 C6713
- MATLAB 2013b (with SIMULINK)
- TDS-2002 DSO 2 channel 60 MHz
- Function generator
- High end PC-workstation

### **• Communication Laboratory**

#### **Major Equipments**

- CDMA Direct Sequence Spread Spectrum trainer
- GHz Spectrum analyzer with track generation
- Mobile phone trainer

- Data communication trainer
- GSM Evaluation kit with F-35 module
- Satellite Communication Trainer
- Fibre Optics Trainer
- Spectrum analyzer application Kit
- ACER, WIPRO computer systems

#### **Software**

- Mobile Phone Experimental Kit with Software
- QualNet
- Matlab
- HFSS
- Network Simulator

### • **Microwave Laboratory**

#### **Major Equipments**

- Klystron and GUNN power supply
- VSWR Meter
- Power Meter
- Reflex Klystron
- GUNN oscillator
- Microwave power meter
- CRO
- Isolator, Attenuator, Circulator
- Frequency Meter, Slotted line Section
- Waveguide, Tees, Directional Coupler
- Standard Gain Horn Antenna
- Variable Load, Bands, Matched Load
- SS Tuner, SC Load
- Antenna Trainer Kit and Antenna Turn Table

### • **Ph.D. Scholar's Laboratory**

#### **Major Equipments**

- Computer with internet connectivity
- Printer
- Simulation Software