

- **LABORATORY NAME: Electronic Design Circuit Lab (128 )**

- **DISCRIPTION OF LAB :**

The courses offered in this laboratory are foundation for Electronics

The purpose of these laboratory courses is to introduce the analysis and design of simple electronic circuits using commonly available electronic components.

The objective of this laboratory experiment is to study various electronic components and the design of various electronic circuits.

The experiments will lead the students through progressively more sophisticated concepts and techniques. The mission of the laboratory is to provide an academic environment that will ensure high quality education, training and research by keeping the students best in the latest development of electronics.

The subjects to be studied in higher semesters require thorough knowledge on electronic devices and circuits.

### **Vision and Scope**

#### **Vision**

- To produce professionally competent electronics engineers capable of effectively and efficiently addressing the technical challenge with social responsibility.

#### **Scope**

- This laboratory provides learning opportunities that should enable the student to do the following upon completion of the courses:
- Implement the functionality of the circuits using discrete components
- Build a circuit then make functional measurements to understand the operating characteristics of the circuit
- Understand the operation, characteristics, parameters and specifications of semiconductor diodes
- Understand the concept and applications of various digital circuits
- Apply characteristics of semiconductor devices, amplifiers, multivibrator and operational amplifiers

- **AVAILABLE RESORCE HARD WARE**

1. DM L.C.R METER
2. FUNCTION GENERATOR 2MHZ
3. 100 MHz 250 MS/S Mono Digital Storage Oscilloscope
4. Digital Multi meter  $\frac{3}{4}$  digit
5. DUAL TRACE CRO 30MHZ
6. BREAD BOARD TRAINER
7. Test Bench Consister WS8 of D37200A
  
8. RYSTALL OSCILLATOR
9. PHESE SHIFT OSCILLATOR
10. COLPITTS OSCILLATOR
11. HARTELY OSCILLATOR

- **Any Other- EDC lab is fully utilized by Electronics and Mechatronics department students on regular basis.**



