

## **ELECTRONICS LABORATORY**

The Department of Electronics has spacious well equipped laboratory to serve practical knowledge in the field of Electronics. The Department conducting Electronic practical's according to the Bengaluru City University prescribed syllabus for BSc Program. The Department is updating the Electronics equipment every year and stock book was maintained for Instruments. The Orientation was given to the fresh entry students during induction classes and maintain records of equipment and components issue register in lab. According to syllabus following practical's were conducted throughout the year

1. **Basic Electronics Lab:** This lab is to make students to get fundamental knowledge for instruments and parts which fundamentally prepare them to build complex circuits in not so distant future. In this lab students develop fundamental electronic circuits and check the outcomes with hypothetical ideas. Lab tests are planned in such a design that the designing aptitude of the students begins to advance.

**Instruments utilized:** Experiments are performed utilizing Function Generator, CRO, and Regulated DC power supply, Bread Board, LED, Diode, and Transistor.

2. **LIC & Instrumentation Lab:** The point of this lab is to connect the hypothetical ideas of different simple Electronic circuits with down to earth plausibility; accordingly students can learn diverse hardware circuits and its electrical attributes in a superior manner. This lab gives plentiful open doors towards students to plan electronic answers for meet indicated prerequisites and test the plan either on bread board or utilizing recreation programming. Hence the gained information guides them to execute different ongoing activities in future.

**Instruments utilized:** Experiments are performed utilizing Digital Storage Oscilloscope, Function Generator, and Bread Board. IC's, Power Supply and so forth Students will utilize Multisim to test their electronic plans.

3. **Digital Electronic Lab:** This lab is intended to make a pathway into computerized world through learning the essentials of advanced hardware that manage either 0 or 1. This lab is to make the students tentatively acquainted with the activity of basic computerized circuits and rationale families Combinational and consecutive circuits. In the majority of the investigations, the accentuation will be on the most proficient method to acquire the ideal yields as portrayed in principle.

**Instruments utilized:** Experiments are performed utilizing Pulse Generator, computerized coach pack, Various ICs (74XX and so on), Logic Probe and Breadboard.

4. **Microprocessor and Microcontroller Lab:** The motivation behind this lab is to make the students viable with the continuous applications utilizing Assembly language programming of 8085 microchip, and distinctive microcontrollers like 8051 and so on Key information on chip like essential engineering, activity, and unique reason applications, programming methods and troubleshooting abilities, and so on - students may gain from this lab. This lab is useful to do top notch research works and to give a stage to the students for multidisciplinary projects.

**Instruments utilized:**8085Microprocessor board utilizing minimax board with important interfacing. 8051Microcontroller board using minimax kit with important interfacing

5. **Communication Lab:** This lab helps the students to fortify their major information on correspondence frameworks which should be the foundation of the cutting edge correspondence frameworks and web. Examinations depended on regulation methods and information checks.

**Instruments utilized:** Experiments are performed utilizing Digital Storage Oscilloscope, Function Generator, and Bread Board. IC's, Power Supply and DMMs.

6. **Verilog and C Programming Lab:** The mission of the lab is to give involved insight to students in the field of simple, computerized and blended sign circuit plan. Fundamental programming knowledge using C was introduced for the students. The lab is planned with straightforward activities to fabricate commonality in students in using Verilog devices for essential rationale circuits plan, reproduction and its confirmation. Explicit methods for planning fast, low-power, and effectively testable circuits will likewise be covered.

**Instruments utilized:**Systems with Pre-Installed Turbo C++ and XILINX Software (XILINX11.1), Mentor Graphics programming.



**\*E- waste maintenance:**The non-functioning/ damaged Electronic equipment's were dumped to E-waste resource.