

## **INNOVATIONS**

The growth and success of any Engineering department is quantified by innovations carried out in the department. These factors play a key role in creating new facilities in the department which leads to improvement and scaling up the quality and overall achievements of the department.

### **Teaching Learning**

ICT tools Edhitch software

The software is used to give subjective and objective assignments to students on-line, to conduct discussions with students regarding curriculum and also to maintain the records of assignments on-line.

Virtual Laboratory

Virtual lab project is initiated by MHRD under the National mission on Education through ICT. Our institute is designated as nodal centre by IIT, Bombay. The platform provides remote access to labs in various disciplines which helps students to learn the basic concepts through remote experimentation.

Lecture Capture Mode

This system records the lectures of the faculty so that they are made available to the students for reference anytime anywhere. This helps the faculty to teach more effectively and students to learn more effectively hence promoting high quality education

### **MoU**

The department has signed an MoU with Eduvance and GAATsis to establish “Center of Excellence in Embedded Systems”. Under this activity, ARM and PSoC are provided by ARM University Program and Cypress Semiconductors, USA for use with projects undertaken by the students of UG and PG. This gives the students a “hands on” experience and exposure to the recent technology in Embedded systems.

### **PCB fabrication**

“Project based learning” philosophy is followed by having mini-projects as a part of curriculum which encourages the students to build electronic circuits for implementing their ideas. To create awareness of the fabrication process, the department has invested in a PCB prototype machine to

fabricate PCBs required for mini projects. Training sessions for the students are organized where students learn the technique of PCB artwork design followed by fabrication of PCBs.

Some miniprojects are designed as per the requirement of the experiments in Electronic Circuits Laboratory.

### **Activity beyond curriculum**

The institute has taken initiative to interact with school children through program “Engagement of People with Science & Technology”. The interest and awareness of technology is created in the minds of school children by organizing special programmes conducted by second year and third year UG students. Small electronic projects useful for day to day applications are demonstrated by the UG students. This gives a platform to the students to practically design and build electronic circuits as well as spices up young minds with technology.

### **IPR**

Research is a necessary and significant component of the academics in the department. To promote research activity, faculty and students are encouraged to work on research oriented projects. The selected projects are further recommended for filing the patents. The department has to its credit two published patents and four patents are filed.