

## **CRITERIA 7**

### **BEST PRACTICES**

**1. Title of the Practice:** Adaptation of ICT tools for Digital Classrooms

**2. Objectives of the Practice**

Changing the traditional mode of teaching learning to innovative methods

Making effective use of ICT

Developing Digital Content

Increasing the student's participation

Creating awareness about the ICT tools

**3. The Context**

Due to Covid -19 pandemic, there are a lot of challenges for the continuous learning process. The need of the hour is to innovate and implement alternative educational methods and assessment strategies. In order to engage the student's attention and attendance in online classes, the Institution focuses on usage of ICT tools to address this issue.

**4. The Practice**

The following ICT based teaching aids are adapted by the faculty members to improve the teaching and learning process

Power Point Presentation PPTs

Recorded lecture videos

Flipped classrooms

e-resources such as NPTEL, SWAYAM, Coursera courses for effective teaching

Google Classroom (GCR) for assignments, notes and additional learning materials

Micro learning YouTube videos

<https://dld-iitb.vlabs.ac.in/>

**5. Evidence of Success**

Reasonable improvement is indicated in the attainment of learning outcomes after the adaptation of ICT tools in classrooms.

## **6. Problems Encountered and Resources Required**

Adapting to ICT tools and creation of digital content was the challenging task for the faculty members.

Pedagogy training programmes are offered by the institute for the faculty members through QIP/TEQIP/QEEE/TLC helped the faculty members to successfully use the innovative methods

## **7. Notes (Optional)**

Any other information regarding Institutional Values and Best Practices which the institution would like to include.

### **Other Best Practices**

The best practices in a systematic way has been adopted in the Coimbatore Institute of Technology. Students are given a chance to enhance their skill in many ways. The following tasks are performed by the students to enhance their skills,

**1. Internship** – Internship for a specified period for both under and post graduates students have been assigned. Students will earn their credits based on the performance in the internship. Sample copies of students undergoing internship by UG and PG students, their performances are enclosed separately.

**2. Mini Project** – Undergraduate students in the III year carrying out the mini project. Guidelines have been framed to carry out the mini project for a period of two semesters. Sample copies of communication reports are enclosed separately.

**3. Hackathon** – All the students are encouraged to participate in the Hackathon competition. They form small groups and carry the works based on the advice of the faculty members guiding them. The list and the copies of the projects carried out by the students are enclosed separately.

**4. Student Counselling** – Student counselling hour has been allotted separately for all the classes, Chairman tutor, senior tutor and tutors will counsel the students to have a better environment in class, department and Institute. The minutes will be recorded for every class. The list of tutors, conduct of SCH and the reports are enclosed separately. The counselling for all students is also given from the CGC cell of CIT. The schedule is enclosed separately.

**1. Title of the Practice:** Best Undergraduate Project Award

### **2. Objectives of the Practice**

- To motivate the students to perform a commendable project to satisfy the industrial needs
- To make the students to compete with the ongoing research projects globally

- To convert the projects in to patents followed by commercialization
- To improve the creativity, skills and knowledge for the students

### **3. The Context**

There is always a thirst for researchers and industrial personnel to identify the problems such as long-time unsolved things, critical issues, batch type works, time-consuming, labour demand, cost-effectiveness, automization, etc. In this scenario, the industries require problem-solving skills, creativity and knowledge full of young minds to solve the above-said problems. Hence, our department encourages and motivates the final year project students to undergo the real-time, industrial need projects and identified best project is awarded annually.

### **4. The Practice**

The students are allotted to the respective faculty members and they together identify the real-time problems or the present day requirements of the industry. According, the projects are designed either experimentally or theoretically through simulation. The necessary aid / support is provided to the students to undergo the project. The projects may be performed in-house or in the industrial site.

### **5. Evidence of Success**

By this practice, students are actively participating in their projects and performing well to compete with the fellow students. This practice has developed the technical skills for the students. Students placement has been considerably increased and some of the students were placed in the company where his/her project helped a lot. Through MoU with the industries, several students have been placed. Recently, final year students of B.Tech. Chemical Engineering were secured 2<sup>nd</sup> place by exhibiting their project work in AICTE Smart India Hackathon Competition 2022.

### **6. Problems Encountered and Resources Required**

Students find difficulty in testing/analysis of materials/product due to the lack of sophisticated equipment / instrument available in the institution. Hence, the institution shall develop the contemporary resources by procuring latest equipment/instruments.

### **7. Notes (Optional)**

Nil

### **Other Best Practices**

The department of chemical engineering offers personality and skill development courses in the curriculum itself for the benefit of students. The students opt these one credit courses and enriching their personality and other skills pertaining to their self and career growth. The courses are

- Critical Thinking
- Creativity & Innovation
- Leadership
- Emotional Intelligence
- Health and Lifestyle
- Psychology for Engineers