



**CHALAPATHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**Chalapathi Nagar, Lam, Guntur – 522 034**

**Accredited by NAAC with A Grade, NBA Accredited CE, CSE, ECE & EEE**

**(Approved by AICTE, affiliated To ANU, ISO 9001 – 2008 Certified)**

## **Best Practices**

**(Academic Year 2020-21)**



### **Best Practice – I**

#### **Title of the Practice:**

Effective Implementation of Outcome Based Education (OBE) in Teaching-Learning Process

#### **Objectives of the Practice:**

- To address the learning levels of students and make teaching more student-centric.
- To guide the faculty towards better planning in teaching learning methodologies.
- To augment effective knowledge transfer through core, elective courses in addition to integrated learning practices.
- To enhance critical thinking, problem solving skills among students.
- To enrich technical skills through modern tools usage.
- To improve self-learning capabilities through MOOCs.
- To enrich the curriculum that suits to current industrial needs.

#### **The Context:**

Good teaching practice has a key influence on student learning - a desired outcome and primary goal of higher educational institutions. Teachers strive to meet the principles of good practices in an effort to provide the best learning experience for their students. Accordingly, our institution has been implementing OBE in Teaching - Learning.

#### **The Practice:**

- The process of teaching-learning for effective content delivery is realized by involving Course Coordinator Committee (CCC), Module Coordinator Committee (MCC) and Department Academic committee (DAC).
- Preparation of course hand-outs and identifying Course Outcome (CO) targets as per the recommendations of BOS.
- Course coordinators play vital role in developing course contents, setting of CO targets, monitoring of attainment gaps, preparation of quality questions and suggesting best delivery methods suitable for specific courses.

- Every year DAC and PAC are reviewing POs and PSOs attainments of graduating batch. After analysis, for effective OBE implementation the following actions are taken to strengthen the teaching-learning process.
- Delivery methods are adjusted according to COs attainment of respective courses.
- Curriculum revisions are done based on POs and PSOs attainments to meet the stakeholder expectations.

II). In order to ensure the effective implementation of OBE, IQAC conducts academic audit twice in every semester. The academic audit team verifies the following parameters and submits the compliance to IQAC Coordinator.

- Course Objectives and Course Outcomes (COs).
- Course articulation matrix (Mapping of COs, POs and PSOs).
- Lesson Plan Schedules.
- Details of learning material as well as e-content developed by the faculty.
- Posting of attendance in attendance registers.
- HODs weekly review in lesson plan and in attendance register.
- Syllabus coverage as per the schedule or not.
- I Mid, II-Mid and End Semester Question Papers and Scheme of valuation.
- Action Taken Reports (ATRs) on I-Mid and II-Mid marks.
- Posting of Internal Marks in attendance registers.
- Semester End Examination result analysis and ATRs.
- COs attainment computations.
- Gap analysis between COs attainments and Target levels & ATRs.

III). IQAC evaluates Faculty Performance and provides necessary recommendations towards implementation of OBE.

Faculty members are encouraged to register for Online Certification Courses such as SWAYAM, COURSERA and to attend Faculty Development Programs/STTPS organized by premier institutions for further improving teaching learning skills.

#### **Evidence of Success:**

- 88.5 % of UG B.Tech students have successfully graduated.

#### **Problems Encountered and Resources Required:**

Acceptance for OBE procedural changes is more than 95% by the faculty. However, adapting to the changes is observed to be slow.

## Best Practice – II

### **Title of the Practice:**

Ensuring holistic development of students

### **Objectives of the Practice:**

- To nurture the technical skills through department specific professional bodies and technical clubs.
- To explore inherent skills of students through National Level Technical and Cultural Symposia.
- To enhance student's physical and psychological competence by games, sports and yoga.
- To understand the importance of community services and to enhance the social empathy by NSS activities.
- To make student a responsible citizen with ideal qualities like character, courage, comradeship, discipline, leadership, secular outlook, spirit of adventure.

### **The Context:**

It is necessary that the student attains requisite knowledge in his/her branch of engineering as well as possess adequate soft skills and programming ability to become employable or an entrepreneur. Attending all the schedules of co-curricular, extracurricular and extension activities would undoubtedly make students well fit for any kind of responsibility.

### **The Practice:**

1. Empowering of students to acquire technical and life skills through following student-centric platforms as part of Co-curricular activities.

- IEEE Student Chapter: The chapter has been very functional in exploring the knowledge levels of students by means of several technical competitions like quizzes, project expo, fast circuit, waste to health etc. In addition to these, guest lectures, workshops and training programs are conducted.
- CSI Student Chapter: It focuses on enriching the technical knowledge of students in the latest programming languages including leadership qualities through different activities continuously.
- ISTE Chapter: It enables students to undergo training that suits to industrial emerging needs through specific skilled development programs. Identifying thrust areas and accordingly workshops / hands-on sessions are conducted that helps the students to get acquainting with latest technological developments.
- IETE Student Chapter: It facilitates in providing guidance and training to students to develop better learning skills and personality.
- Department Technical Clubs: The main aim of these clubs is to share the latest technological developments pertaining to their core subjects, performing competitions, and producing department technical magazines covering technical and nontechnical aspects helps in getting contemporary issues. These clubs are found to be so crucial, and students have been involving actively in all activities. Each and every department has its own technical club.

II). Enrichment of student's physical and mental competencies through extra-curricular activities.

Sports and Games: It aims to develop students' physical competence and knowledge of movement and

safety, and their ability to use these to perform in a wide range of activities associated with the development of an active and healthy lifestyle. The necessary sports facilities suitable for providing training are made available.

### **III) Development of student's attitude towards social service by Extension Activities.**

NSS Unit: The institute promotes regular engagement of students, faculty and supporting staff with the neighborhood community for holistic and sustained community development through NSS Unit. It enables students to understand practical problems of the common people in society and enhance social empathy. Further, it helps to realize the value of civic sense, public morality and efficient utilization of resources, good traffic sense, public safety and ethical living.

#### **Evidence of Success:**

NSS Unit conferred with "National Service Scheme award" by Ministry of Youth Affairs and Sports, Govt. of India for the year 2020-21.

E.Sreemaurya and N.Prasanthi got second prize in International Conference on Emerging Research in Computing, held on 30 June 2021.

#### **Problems Encountered and Resources Required:**

Strict adherence to the regular academic schedule of teaching learning, time constraints have affected the participation of students in Co-Curricular, Extra-Curricular and Extension activities.



Dr M Chandra Sekhar  
Principal, CIET