

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

The institution follows a structured process to assess the attainment of program outcomes (POs) and course outcomes (COs), ensuring continuous improvement in teaching and learning.

Step 1: Defining Course Outcomes (COs):

- ✓ COs are outlined in the university syllabus and may be further elaborated on by Department Advisory committee (DAC) by discussions with course coordinators, module coordinators and Program Advisory Committee (PAC).
- ✓ Each CO is assigned a weightage based on its importance to the course.
- ✓ Attainment is measured through continuous internal assessments (assignments, online quizzes and descriptive tests) and the semester-end exam, focusing on direct assessment methods.

Step 2 & 3: Direct and Indirect Assessment:

- ✓ **Direct assessment:** Direct assessment involves evaluating student performance in both internal and external examinations, with the final course grade based on a weighted average of these assessments.
- ✓ **Indirect assessment:** Before final exams, students' complete course-end surveys to provide feedback on their learning experience. These surveys, rated on a five-point scale, are used to indirectly assess student learning and are then converted to a three-point scale for analysis.
- ✓ By taking the weighted average of internal, external and course end survey the final CO attainment is calculated.

Step 4 & 5: Mapping COs to POs and PSOs:

- ✓ Attained COs are mapped to POs and PSOs with assigned weightage to determine their contribution to overall program goals.
- ✓ COs of specific subjects are mapped to relevant POs on a scale of 3, 2, and 1. Attainment for each PO is calculated by averaging the attainment of all COs related to that PO.

- ✓ Similar calculation will be done for all the PO's. The PO attainment for a batch of students will be calculated by taking the sum of all attainments for a particular PO and dividing by the number of courses mapped to the same PO.

Indirect Assessment Tools :

- Questions relevant to the POs/graduate attributes and PSOs are given to the students at the end of the program and are rated on a five-point scale. These questions will be asked to gather student opinion and observations about the programme. The exit survey attainment will be calculated accordingly. PO attainment for a batch is then calculated by giving 80% weightage to direct attainment and 20% weightage to exit survey results. Similar calculations are performed for PSO attainment.
- ✓ This mapping is visualized through graphs for analysis.

Step 6: Assessment Integration:

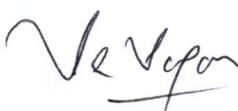
- ✓ The CO-PO/PSO mapping and assessment process are incorporated into assignments and lab work.

Step 7: Qualitative Analysis and Action:

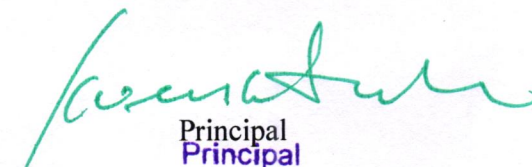
- ✓ Course experts analyze the attainment of COs and their contribution to POs/PSOs.
- ✓ Based on this analysis, they identify areas for improvement and develop action plans to address any gaps, including incorporating additional content or teaching methods.

Step 8: Continuous Improvement:

- ✓ If CO attainment falls below satisfactory levels, teaching methods are revised to enhance student learning.
- ✓ Attainment at satisfactory levels indicates effective teaching methods.


IQAC Co-ordinator




Principal
Principal
Sir C R Reddy College of Engineering
ELURU - 534 007