



2.6.2 Attainment of POs and COs are evaluated.

CO Attainment Calculation Process:

Assessment of the course outcomes is one of the essential components of outcome-based education (OBE). Each Course Outcome (CO) is initially developed based on the Program Outcomes (POs) and other needs. COs of each Course must be analyzed and appraised at the conclusion to determine whether they have been attained.

A method or process used by the department to identify, collect, and prepare data for evaluating the accomplishment of Program Outcomes (POs) and Program-Specific Outcomes (PSOs) are called assessments. Achieving a normative outcome on reaching desired goals is known as attainment. The primary measure of attainment is the level of academic performance, as seen in test results. Course outcome attainment is calculated based on direct and indirect assessment methods.

Direct Assessment Methods

Direct Assessment can be calculated based on external and internal continuous assessment methods. The External Assessment consists of the following criteria: Semester-End Examination, project work, Internship, final practical exam, etc., and the Internal Assessment evaluation is the continuous Assessment by different methods like assignment, Quiz, lab report, and project work. Each Course has a specific course outcome mapped with program outcomes and setting of course outcomes attainment target based on the rubrics.

If CO attainment = 6 out of 10

Rubrics:

If 50% of the students crossed 6/10 of the marks: Attainment Level 1

If 60% of the students crossed 6/10 of the marks: Attainment Level 2

If 70% of the students crossed 6/10 of the marks: Attainment Level 3

Direct attainment calculation = Direct Internal (40%) + Direct External (60%)

Indirect Assessment Methods:

Course End Survey: This survey was taken from students after their course commencement.

CO attainment = Direct attainment calculation (80%) + Indirect attainment (20%)

Program Outcomes Attainment calculation:

The department sets Program Outcomes as per guidelines provided by the AICTE and NBA.



For the Engineering program, generally, twelve POs are set. For each Course, mapping of course outcomes and program outcomes on a scale of 1 to 3, 1 being slight (low), two being moderate (medium), and 3 being substantial (high). The course outcomes written and their mapping with POs are reviewed frequently by a committee of senior faculty members before these are finalized.

After mapping course-wise, the PO average was calculated for each POs.

Direct POs Attainment is calculated as per the formula mentioned above.

Indirect POs Attainment is collected from the students after completion of the program in terms of the program exit survey format based on all PO's.

Overall POs attainment level= Direct POs attainment (80%) + Indirect POs attainment by Program End survey (20%)