

2.6.2 – *Attainment of Programme outcomes and course outcomes are evaluated by the institution.*

Attainment of Course Outcomes is directly calculated through internal and external assessments. The knowledge and skills are assessed internally based on the the performance in assignments, experiments, lab assignments, projects, class tests and assessment tests. However, the internal assessment process is not the same for all programmes.

Both direct and indirect methods are used to calculate overall CO Attainment

Following steps are used to evaluate the levels of CO-PO attainment:

1. Define Programme Outcomes
2. Define/Obtain Course Outcomes
3. Mapping of Course Outcomes with Programme Outcomes.
4. CO measurement through assessment.
5. Obtain CO attainment table through direct and indirect assessment methods
6. Obtain PO attainment table through direct and indirect assessment methods.

CO Attainment Internal Attainment is the average of attainments obtained using various internal assessment tools. Direct attainment is calculated with the help of internal and external attainment levels using the formula : $\text{Total Direct Attainment} = 20\% \text{ internal attainment} + 80\% \text{ university attainment}$ Indirect Attainment is calculated using the CES. Overall CO attainment consists of 20% of indirect assessment and 80% of direct assessment.

PO Attainment The PO assessment is done at the end of each programme based the CO attainment of all curriculum components. The attainment level can be determined either by a particular programme or, more commonly, by the institution. By analysing the students' knowledge, the institution or the programme can make the best possible choice of the PO attainment. Overall PO Attainment is determined by taking sum of 80% of PO attainment by direct method and 20% of PO attainment by indirect method. • Overall indirect method is the 100% attainment through GES. • Overall PO attainment is the sum of 80% of direct attainment and 20% of indirect attainment.