

## 2.6.2 Attainment of Program Outcomes and Course Outcomes are evaluated by the institution

Visakha Institute of Engineering & Technology values the assessment of teaching and learning activities which is validated through distinct mechanisms. It follows two different strategies to validate Outcome Based Education through direct and indirect methods. In the first stage, Course Outcomes (COs) are mapped with the respective Programme Outcomes (POs) and Programme Specific Outcomes (PSOs). The mean value of mapping indicates how COs are related with POs and PSOs.

In the second stage, the Course Outcomes with Programme Outcomes and Programme Specific Outcomes are validated through examination system. The course outcomes reflect different cognitive levels of each course. It is done on the basis of Revised Bloom's Taxonomy.

The students' ability to remember and understand are tested through Multiple Choice Questions, Short Answer Questions, Quiz, Snap Test and Oral Test, whereas their ability to apply, analyse, evaluate and create are assessed through Essay Type Questions, Assignments, Practical Examinations, Field Report, Internship and Project Works.

To calculate the examination attainment levels of the courses, VIET fixes threshold value of 40 to 49 percent of students getting 40 percent of marks weighted as 1, 50 to 59 percent of students getting 40 percent of marks as 2 and 60 and above percent of students getting 40 percent of marks as 3 for both Continuous Internal Assessments and Summative Examinations. Continuous Internal Assessments and the Summative Examinations are weighted equally as 0.5. Later, the examination attainment of Course Outcomes is estimated as the sum of Continuous Internal Assessment weightage multiplied with CIA threshold value and the Summative weightage is multiplied with that of Summative Examinations ( $0.5 \times \text{CIA threshold value} + 0.5 \times \text{Summative Examinations' threshold value}$ ).

In the third stage, the College assesses the direct attainment of each Course Outcome (CO) with Programme Outcomes (PO) and Programme Specific Outcomes (PSOs) using the following formula:  $\text{Direct attainment} = \frac{1}{3} * \text{Course Attainment Level} * \text{Mean value of the Concerned PO or PSO}$ .

In the indirect method, the Course Outcomes with Programme Outcomes and Programme Specific Outcomes will be validated through feedback mechanism. The feedbacks will be collected at the exit level on 3-point scale.

The collected feedbacks will be analysed and categorized with the following threshold values:

50 to 59 percent of respondents giving response as good is marked as 1


60 to 69 percent of respondents giving response as good is marked as 2

70 and above percent of respondents giving response as good is marked as 3

Finally, the overall attainment is calculated by employing the following formula.

**Overall attainment = [(Assumed Test Weightage \* Direct Attainment Value) + (Assumed Feedback Weightage \* Feedback Value)]**

The analysis of the results will be placed in the meetings of the Governing Body, the Academic Council and the Departments. The IQAC initiates appropriate steps to ensure quality of the programme



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