

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

All programs have Program Outcomes, Course Outcomes and Program Specific Outcomes developed and specified in program curriculum and syllabus book. Course articulation matrix and Program articulation matrix are developed for all programmes. Teaching learning methods and assessments like tests, quizzes, projects etc. are aligned to the outcomes. Questions in assessments are set at various Blooms levels of the outcomes. Questions pertain to learning outcomes or specific outcomes depending on the type of assessment and the nature of course. Wherever possible, marks scored by individual students in each question of various assessments are captured. The marks/ grades of each student are used in calculation of course wise course outcome attainment. Direct and In-direct methods are used for calculating attainments. Course outcome attainment results in Program Outcomes and Program Specific Outcomes attainment of programs with the help of mapping in the course and program articulation matrix. The steps and procedure to be followed are specified in a quality system manual. Four level Likert's scale is used for reporting and analyzing attainments. Four levels in the Likert's scale corresponds to scores 0-3. Targets with respect to courses and program attainments scores are fixed and monitored periodically for attainment and corrective action by the departments.

Assessment tools applied for assessing the attainment of Course Outcomes

Assessment Method	Description
Continuous Assessment	Continuous Comprehensive Evaluation Test (CCET) and End Semester Exam (ESE) marks help to assess the attainment levels of COs pertaining to course knowledge, problem analysis, solving and effective communication.
End Semester Exam	
Laboratory Tests	Internal marks for laboratory courses are awarded on continuous basis and End semester evaluation is done in the presence of examiners. This typically involves design & development of solutions, investigation of problems, usage of apt tools / techniques, individual work, effective management and ability for life-long learning.
Tutorial	Tutorials will be conducted for analytical courses. This helps to assess the course knowledge, analysis, design and tool usage capabilities.
Quiz	Quiz component will be conducted for theory and practical courses. This helps to assess the course knowledge, analytical skills and individual ability of the learner.
Assignments	Assignments involve problem-solving / case studies / design / tool usage etc. and contribute to the measurement of corresponding PO attainment.
Seminars	Seminars usually involve self-study and contribute towards the assessment of life-long learning capability besides communication, individual work, knowledge and problem analysis.
Case Study	Case studies may involve analysis, design, investigation and proposal of environmentally / economically sustainable solutions

	for societal problems. They also help to test the individual / team work, communication skills and life-long learning ability.
Project work	The Project work is carried out during fourth semester (Mini-project), sixth semester (Innovative and Creative Project) and eighth semester (Project).