



Criteria 2.6. Student Performance and Learning Outcomes

2.6.1 The institution has stated learning outcomes (Program and Course outcomes), graduate attributes, which are integrated into the assessment process and widely published through the website and other documents, and the attainment of the same is evaluated by the institution

CO PO Attainment Tool

These are measurable instruments used to evaluate students' performance against predefined learning outcomes.

A. Direct Assessment Tools

1. Continuous Internal Assessment (CIA):

- *Description:* Includes sessional examinations, design assignments, juries, and quizzes conducted twice a semester.
- *Purpose:* Helps identify individual student learning gaps, creative progress, and conceptual understanding.
- *Example Tool:*
 - Rubrics for sessional exam evaluation.
 - Marksheets for assignments, presentations, and juries.

2. End-Term Examination:

- *Description:* Comprehensive examinations or juried reviews that evaluate students' grasp of the entire design brief or syllabus.
- *Purpose:* Contributes to final CO attainment by assessing application, problem-solving, and design thinking.
- *Example Tool:* Detailed answer evaluation matrices mapped to COs.
 - Questions or critique criteria designed to assess conceptual clarity, technical detailing, and innovative thinking.
 - Inclusion of case-based or scenario-driven design problems.

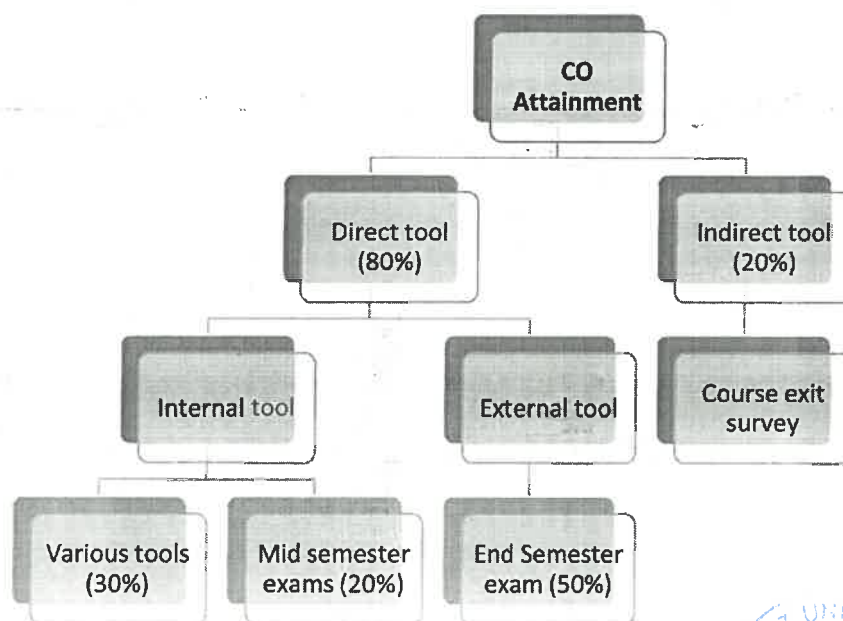


Figure 1: List of Course Assessment tools

3. Project-Based Learning (PBL):

- *Description:* Studio-based projects, model-making, collaborative design briefs, or case studies.
- *Purpose:* Encourages hands-on learning, creativity, and teamwork through real-world design problems.
- *Example Tool:* Peer and faculty evaluation rubrics.
 - Guided design projects with predefined objectives and deliverables.

4. Simulation-Based Learning:

- *Description:* Use of 3D modeling, rendering, VR/AR tools, or prototyping software for design simulations.
- *Purpose:* Enables experiential and iterative design learning in a virtual environment, reducing material cost and promoting exploration.
- *Example Tool:* Performance and iteration reports generated by software. Example: Blender, SketchUp, Rhino, or Enscape for visual simulations.

B. Indirect Assessment Tools

These tools measure students' perceptions, opinions, and satisfaction levels regarding their learning outcomes.

1. Course Exit Surveys:

- *Description:* Surveys conducted at the end of each course.
- *Purpose:* Capture students' self-perceived achievement of COs and overall satisfaction.
- *Example Tool:* Survey covering CO-specific and generic learning aspects.

Table 3: List of Course Assessment Tools

S. No.	Assessment tool	Sub category	Methodology	Weightage	Overall Percentage
1	Direct	Internal	Various tools <ul style="list-style-type: none"> Assignments/ Class tests/ Group projects or Presentations/Viva/Quiz/ Surveys 	30%	80%
			Mid Semester Exams <ul style="list-style-type: none"> Practical exam Theory exam (where applicable) 	20%	
2		External	End Semester exam <ul style="list-style-type: none"> Practical exam Theory exam (where applicable) 	50%	



3	Indirect	Course exit survey			20%
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3. Evaluation and Attainment Analysis

The attainment of learning outcomes is calculated through a weighted combination of direct and indirect assessments:

Formula for Attainment:

Total Attainment= (Direct Attainment Weightage) × (Direct Assessment Average) + (Indirect Attainment Weightage) × (Indirect Assessment Average)

4. Tools for Advanced Learners

- Encouragement for completing certificate courses for MOOCs
- Encouragement for participating in competitions/Seminars/conferences etc
- Challenging assignments for increased engagement Application-based assignments requiring critical thinking.

5. Tools for Slow Learners

- Remedial classes
- Peer tutoring groups adopted for better learning
- Motivation and personal attention by faculty mentor.

Conclusion:

The implementation of CO-PO attainment tools, complemented by robust technological integration and faculty training ensures an effective evaluation of learning outcomes. Direct and indirect assessments provide a balanced approach, accommodating the diverse needs of slow and advanced learners. By leveraging data-driven insights and stakeholder feedback, institutions can continuously enhance the alignment of course outcomes with program objectives, ultimately driving student success and institutional excellence.

Note: As the School of Design follows a practice-oriented and experiential learning approach, its attainment calculations and assessments may differ from those of other courses offered at the university.

