



<b>CRITERION 6</b> <b>Governance, Leadership and Management</b>	<b>6.5 Internal Quality Assurance System</b>
<b><i>6.5.2 The institution reviews its teaching learning process, structures &amp; methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms</i></b>	

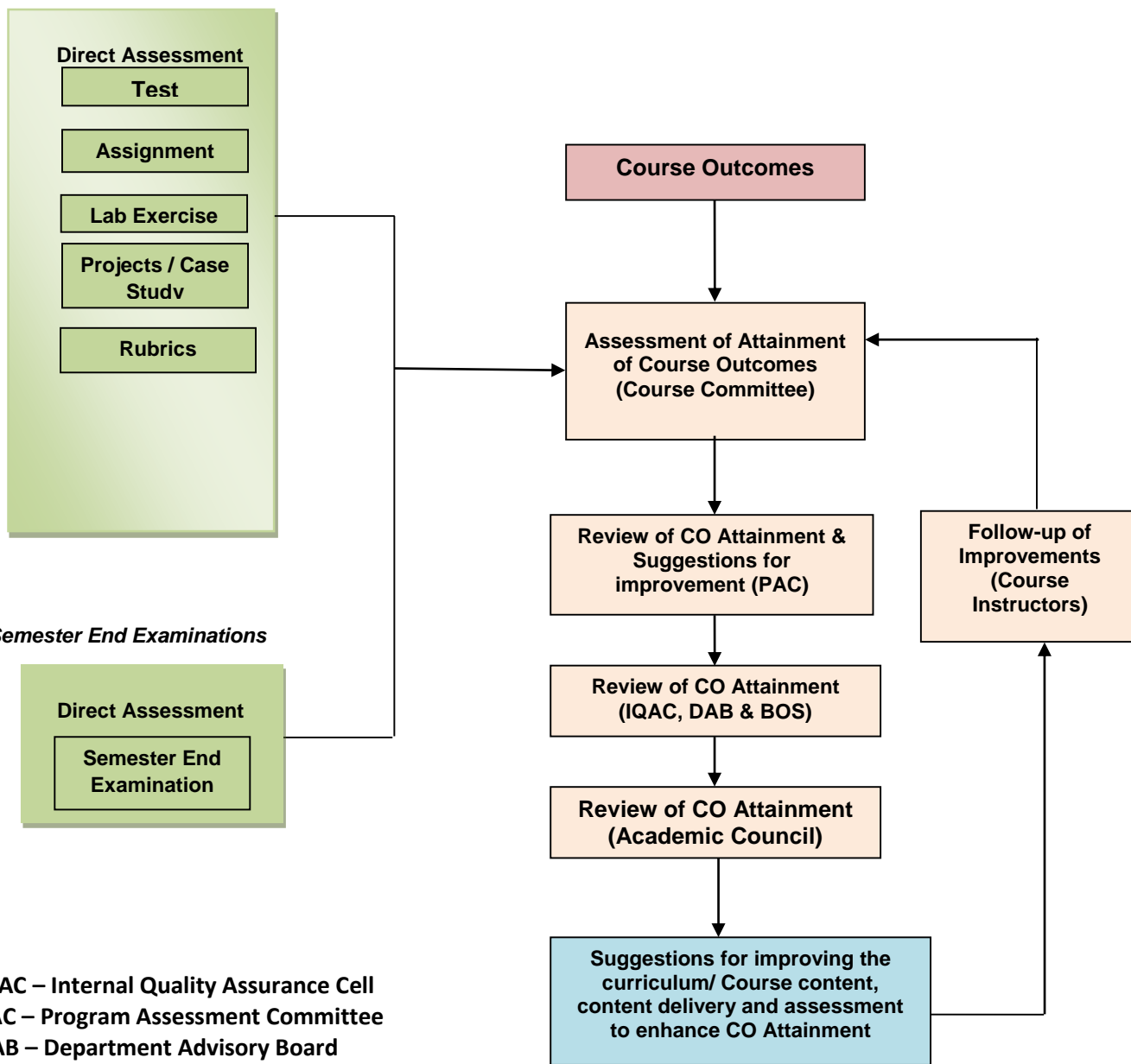
### **Process for Assessment of Attainment of Course Outcomes**

#### **Assessment Tools and Processes used for the Assessment of Attainment of Course Outcomes**

- The assessment of attainment of Course Outcomes is done based on the performance of students in the Cumulative Internal Examinations (CIE) and the Semester End Examinations (SEE) through direct and indirect assessment tools. The direct assessment tools in CIE are tests, assignment, lab exercise, case study and in SEE the University or Autonomous End Semester Examination as shown in Figure B.3.2.1. The indirect assessment tool is the Course Exit Survey that is obtained from the students for each course at the end of the semester.
- The Course Committee, which consists of the course coordinator and the course instructors of the course, calculates the attainment of COs and prepares the report of CO attainment along with the suggestions for the improvement.
- Course Outcome attainment analysis is performed by the Program Assessment Committee (PAC) and it reviews the suggestions that are already given for improving the attainment.
- The review of CO attainment analysis is done by the Internal Quality Assurance Cell (IQAC), Department Advisory Board (DAB) and Board of Studies (BoS). The members of these forums also give further suggestions for improving the attainment.
- Finally, the Academic Council reviews the attainment analysis of COs and suitable actions are initiated for improving the curriculum/Course content, content delivery and assessment to enhance the CO Attainment.



**Cumulative Internal Examinations**





## Process for Mapping the Assessment Questions

The questions for assessment of COs should align with:

- Blooms taxonomy level of the Course Outcome
- Correlation Level of CO-PO Mapping

### 1. Continuous Internal Examination

#### CIE Assessment Tools:

<b>Direct Assessment Tools</b>	<ul style="list-style-type: none"> <li>▪ Periodical Test</li> <li>▪ Assignment</li> <li>▪ Project</li> <li>▪ Presentation</li> <li>▪ Case Study</li> </ul>
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#### CIE - Direct Assessment Tools and Procedure:

When other assessment tools are used in addition to the Periodical Tests, weightages could be fixed as per the following guidelines:

Assessment Tool	Weightage	Remarks	Formula
Common Assignment (CA)	20%	<ul style="list-style-type: none"> <li>➤ Common question can be given to all the students</li> <li>➤ All the students must submit assignment</li> </ul>	$CIE_{Direct} = 0.8*PT + 0.2*CA$
Group Assignment (GA)	40%	<ul style="list-style-type: none"> <li>➤ Different questions should be given to different groups</li> <li>➤ All the students must submit assignment</li> </ul>	$CIE_{Direct} = 0.6*PT + 0.4*GA$
Case Study (CS)	50%	<ul style="list-style-type: none"> <li>➤ Case study may cover more than one CO.</li> <li>➤ Students must be encouraged to give presentations in groups.</li> <li>➤ Rubrics may be used for assessment</li> </ul>	$CIE_{Direct} = 0.5*PT + 0.5*CS$
Mini Project (MP)	50%	<ul style="list-style-type: none"> <li>➤ Students must do the projects by themselves either individually or in groups</li> </ul>	$CIE_{Direct} = 0.5*PT + 0.5*MP$
Quiz (QZ)	30%	<ul style="list-style-type: none"> <li>➤ Quiz may be conducted through Moodle</li> </ul>	$CIE_{Direct} = 0.7*PT + 0.3*QZ$



Assessment Tool	Weightage	Remarks	Formula
Seminar (SR)	40%	➤ Rubrics may be used for assessment	$CIE_{Direct} = 0.6*PT + 0.4*SR$

**Procedure for Fixing Threshold in CIE- Direct Assessment:**

- The Class average or Minimum Pass Mark can be taken as threshold

**Attainment through CIE - Direct Assessment:**

$$CIE_{Direct} = \% \text{ of students getting more than the threshold}$$

**Attainment through CIE**

$$CIE_{Attainment} = CIE_{Direct}$$

**2. Semester End Examination (SEE)**

**Tool: End Semester Examination**

**Procedure for Fixing Threshold in SEE - Direct Assessment:**

- Anna University Batches Threshold Percentage: Pass marks
- Autonomous Batches Threshold Percentage
  - ❖ If Class average is less than 50%, then Threshold is 50%
  - ❖ If Class average is between 50% and 60%, then Threshold is the Class average
  - ❖ If Class average is more than 60%, then Threshold is 60%

**Attainment through SEE:**

$$SEE_{Attainment} = \% \text{ of students getting above the Threshold Percentage}$$

- ❖ **Attainment** - % of students getting more than the threshold



**Overall Attainment: Course Outcome wise Attainment**

**Anna University and Autonomous Batches:**

$$\text{CO}_{\text{Attainment}} = 0.5 * \text{CIE}_{\text{Attainment}} + 0.5 * \text{SEE}_{\text{Attainment}}$$

**Target of CO Attainment - 60%**

**Attainment Level I - 60% to 69 %**

**Attainment Level II - 70% to 79%**

**Attainment Level III - 80% and above**