

# **BISHOP AMBROSE COLLEGE**

**(Autonomous)**

*Affiliated to Bharathiar University*

Accredited with “B++” Grade by NAAC



**Outcome Based Education (OBE)**

**Manual**

**Academic Year 2024-2025**

# Bishop Ambrose College

## OBE Manual

### GRADUATE ATTRIBUTES

- ❖ DISCIPLINARY KNOWLEDGE
- ❖ SCIENTIFIC REASONING/ PROBLEM ANALYSIS
- ❖ ENVIRONMENT AND SUSTAINABILITY
- ❖ ETHICS
- ❖ COOPERATION / TEAM WORK
- ❖ COMMUNICATION SKILLS
- ❖ SELF-DIRECTED AND LIFE-LONG LEARNING

### Program Educational Objectives (PEOs)

**PEO 1: Academic Excellence and Integrity:** To provide high-quality education that emphasizes academic excellence and integrity, preparing students to perform effectively in their chosen fields and uphold ethical standards.

**PEO 2: Personal Growth and Confidence:** To cultivate courage, self-confidence, and resilience among students, equipping them to pursue personal and professional goals with determination and a growth mindset.

**PEO 3: Environmental Awareness and Sustainability:** To promote an understanding of environmental issues and sustainability practices, preparing students to address and advocate for solutions to environmental challenges.

**PEO 4: Social Responsibility and Patriotism:** To develop a strong sense of patriotism and social responsibility, encouraging students to contribute positively to their communities and society at large.

**PEO 5: Character and Value Development:** To instil strong ethical principles, spiritual awareness, and moral values in students, enabling them to exhibit integrity and demonstrate responsible behaviour in their personal and professional lives.

## **PROGRAMME OUTCOME** **Under Graduate Programs**

**PO1 Disciplinary knowledge:** Graduates will be capable to apply the knowledge, principles and fundamentals of their discipline

**PO2 Scientific reasoning/ Problem analysis:** Graduates will able to critically analyze, categorizes, formulate and solve the problems that emerges.

**PO3 Environment and sustainability:** Graduates will understand the impact of environmental and societal context and strive for sustainable development.

**PO4 Ethics:** Graduates will function effectively with social, cultural and ethical responsibility as an individual or as a team member with positive attitude.

**PO5 Cooperation / Team Work:** Graduates will function effectively as member or leader on multidisciplinary teams to accomplish a common objective.

**PO6 Communication Skills:** Graduates will able to communicate effectively with diverse types of audience and also able to prepare documents to different groups.

**PO7 Self-directed and Life-long Learning:** Graduates will recognize the need for self-motivation to engage in lifelong learning to be in par with changing scenario.

## **PROGRAMME OUTCOME** **Post Graduate Programmes**

**PO1 Advanced Knowledge and Expertise:** Graduates will demonstrate a deep and comprehensive understanding of their specialized field, including current theories, methodologies, and practices.

**PO2 Research and Analytical Skills:** Graduates will be proficient in designing, conducting, and evaluating original research.

**PO3 Critical Thinking and Problem Solving:** Graduates will exhibit advanced critical thinking skills, allowing them to approach complex problems from multiple perspectives.

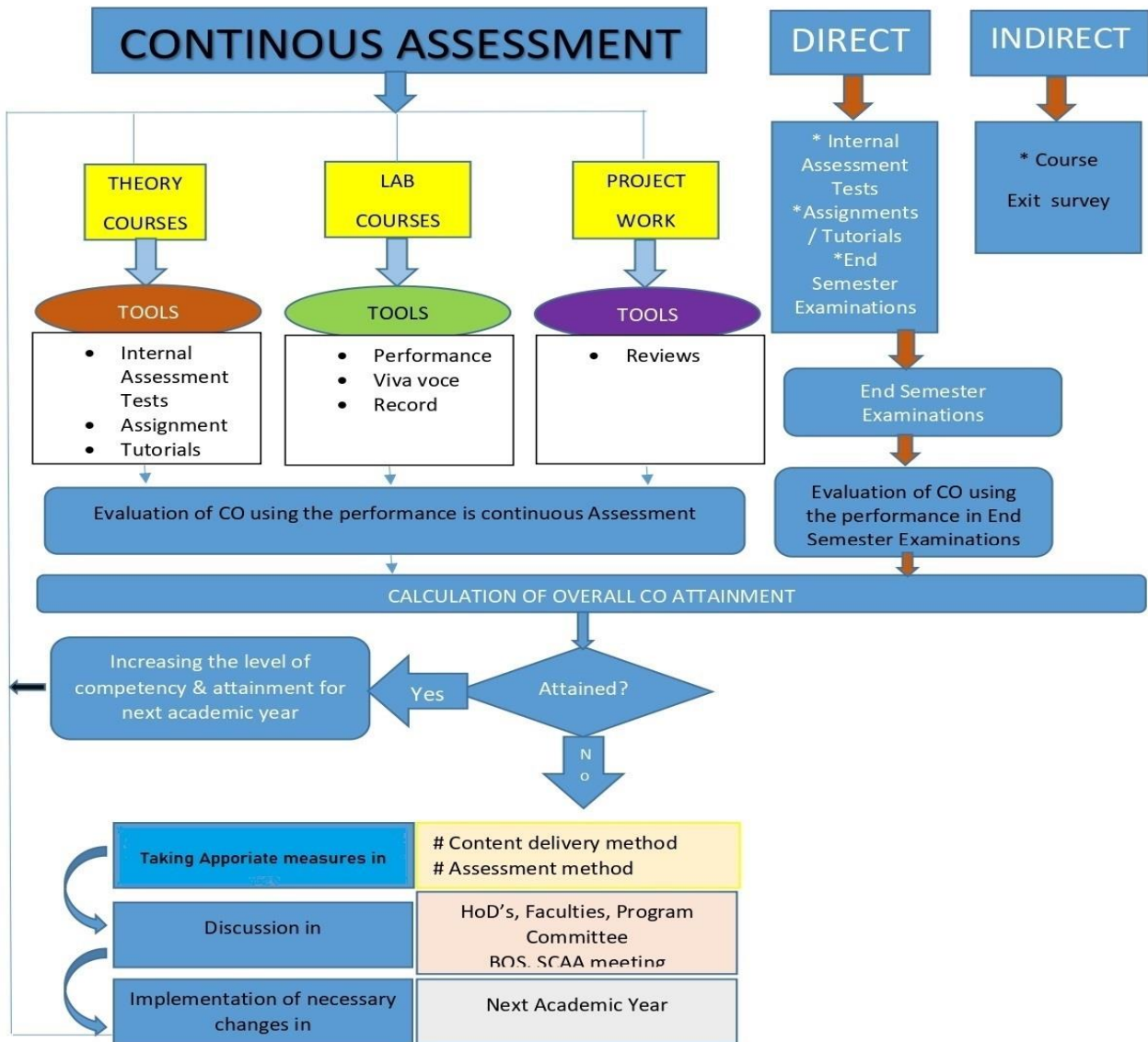
**PO4 Communication and Presentation Skills:** Graduates will be able to effectively communicate their ideas, research findings, and professional opinions to diverse audiences through written, oral, and visual means.

**PO5 Leadership and Management Abilities:** Graduates will possess strong leadership and management skills, enabling them to effectively lead teams, manage projects, and influence organizational outcomes in their field.

**PO6 Interdisciplinary Integration:** Graduates will be capable of integrating knowledge and methodologies from various disciplines to address complex issues.

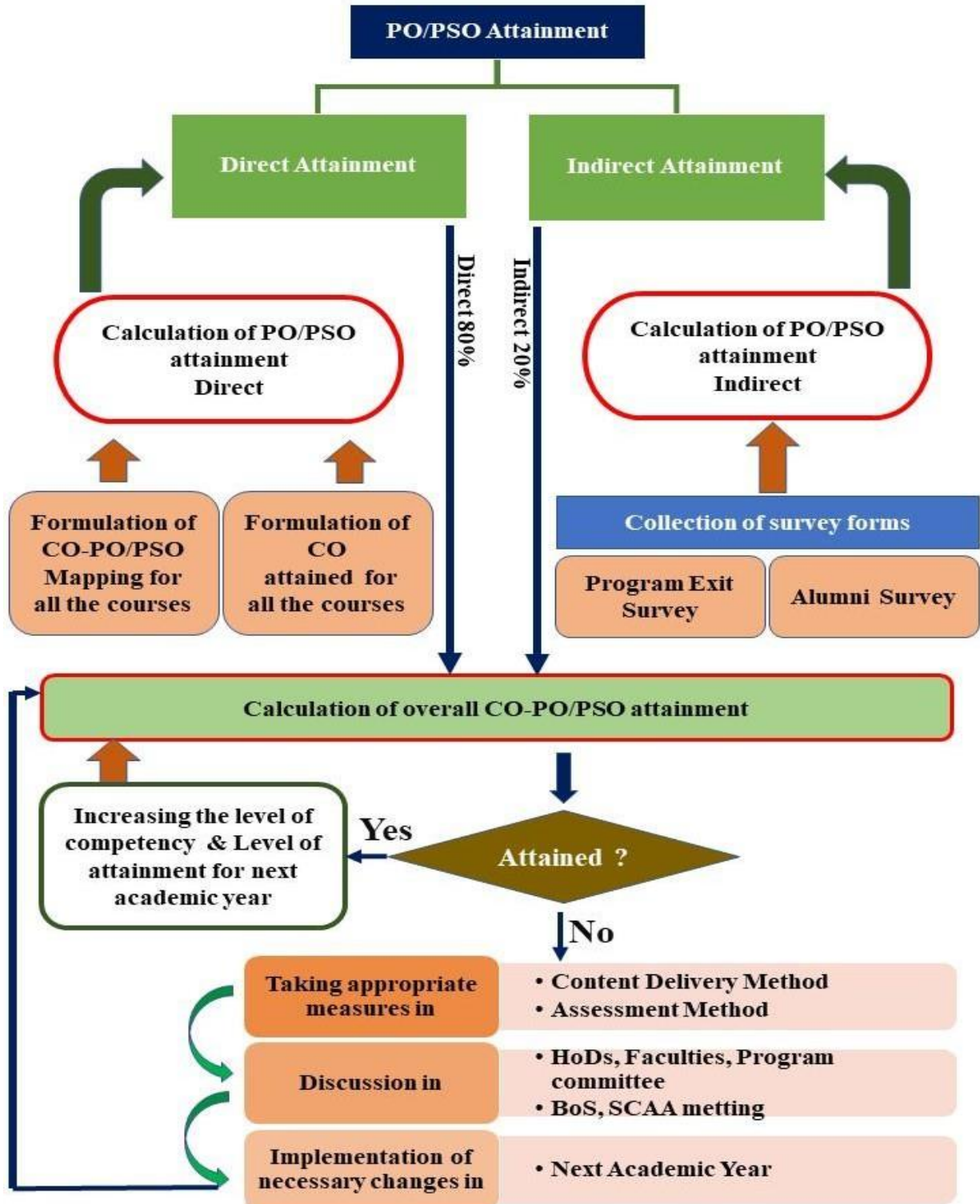
**PO7 Professional and Ethical Standards:** Graduates will adhere to the highest standards of professionalism and ethics in their practice.

## Process for CO Attainment



End semester Examination

## Process for PO/ PSO Attainment



## Direct Assessment

Evaluation Methods	Process
<b>Internal Assessment Tests</b>	<b>Two Internal Assessment Tests are conducted per semester to evaluate the attainment of course outcomes. Each question is mapped with COs and blooms level.</b>
<b>Assignments</b>	<b>The assignments are given to the students based on the subject nature. Assignment sheets are prepared by the faculty member with COs and levels.</b>
<b>Continuous Assessment &amp; Model Exam (Laboratory Course)</b>	<b>The evaluation criteria for each experiment are based on performance, viva-voce and record mark. The attainment of COs is calculated through continuous assessment and model practical performance.</b>
<b>Project Reviews</b>	<b>Three reviews are conducted periodically to monitor and evaluate the progress of the project using project rubrics. Viva-Voce is conducted at the end of the semester as per University norms.</b>
<b>End Semester Examination</b>	<b>At the end of each semester, examination is conducted for Theory and Laboratory courses, in which question paper covers the entire syllabus and all the Cos are covered in the question papers.</b>

### Theory courses:

For each theory course, faculty member calculates the course outcome attainment using End Semester Examination and Internal Assessment Test. The attainment level will be calculated based on the average performance levels of both End Semester Examination and Internal Assessment Test. The evaluation process of Internal Assessment Tests/Assignments/Group Discussion is counted for 40% and the remaining 60% will be given for End Semester examination. Based on the level of CO attainment, the faculty member will decide whether to increase the competency level or change the content delivery method, assessment methods to improve attainment level for the course.

	Assessment Tool	Weightage	Frequency
<b>CO Attainment</b>	Internal Assessment Tests	40%	<b>Twice in a Semester</b>
	End Semester <b>Examination</b>	<b>60%</b>	<b>Once in a Semester</b>

### Laboratory Courses:

For laboratory courses, the course outcome will be calculated based on performance, viva-voce, record work and model practical examination with the weightage of 40% for Continuous Internal Assessment and 60 % weightage for End Semester Practical Examination. Based on the CO attainment level, the faculty member will decide whether to increase the competency level or enhance the practical knowledge of the students in order to improve attainment level for the laboratory course.

	Assessment Tool	Weightage	Frequency
<b>CO Attainment</b>	Continuous Internal Assessment	40%	<b>Every Week</b>
	<b>End Semester Practical Examination</b>	<b>60%</b>	<b>Once in a Semester</b>

### Project Work Assessment:

For project work, Continuous Internal Assessment is based on the performance in the three reviews. The Course Attainment is calculated based on the three reviews and project Viva voce.

- Project review is conducted every month to review the progress of the project.
- Suggestions are given to the students for their continuous update and improvement.
- Evaluation of each review is based on the parameters discussed in teaching learning process.

The faculty member will decide the competency level and attainment level for project work considering the average performance level of the students.

	Assessment Tool	Weightage	Frequency
<b>Continuous Assessment</b>	Reviews	40%	<b>Every Month</b>
<b>End Semester Assessment</b>	<b>Viva-Voce</b>	<b>60%</b>	<b>Once in a Semester</b>



## Indirect Assessment

### Course Exit Survey (Theory & Practical):

The course exit survey is process of collecting reviews on each course from the students at the end of each semester. It helps to improve the overall aspect of the course in future semesters. The survey covers the overall view about teaching and learning of the respective course. The survey form reveals the following attributes

- Course Content- Quality of the content provided, incorporation of Outcome Based Education
- Course Delivery- Experience about the teaching methodologies, ICT tools, NPTEL resource utilization
- Course Assessment- Methodology of evaluation, feedbacks on assignments and tutorials
- General suggestions for improvement

### Program Exit Survey:

It is a process of collecting satisfaction survey on the quality of education from the perspective of graduating students upon the completion of their program. Program Exit Survey is structured with 5 likert scale questions. The survey helps in identifying

- Perception on the overall quality of teaching, learning and mentoring.
- Opinion about the support provided by the programme in projects, modern tools and softwares.
- Support provided for extra-curricular and co-curricular activities.
- Exposure to the competitive exams and personality development programmes.
- Insight on imparting skills like entrepreneurship and societal responsibility through NSS, YRC, NGO and Club's
- Improvement on facilities.

PO Attainment	Tools	Process
Indirect	<ul style="list-style-type: none"><li>• Program Exit Survey</li></ul>	On completion of program, a feedback is obtained from each student about the entire program experience.
	<ul style="list-style-type: none"><li>• Alumni Survey</li></ul>	During the alumni meet, graduation day the alumni survey is collected from the graduates based on the various parameters.



# Bloom's Taxonomy Levels

## Level 1: Remember

**Level Definition and Attributes:** Students are able to exhibit memory of previously learned materials by recalling facts, terms, basic concepts, and answers.

**Active Verbs:** choose, define, find, how, label, list, match, name, omit, recall, relate, select, show, spell, tell, identify, describe, copy, locate, recognize, memorize, quote, reproduce, tabulate, discover, duplicate, listen, enumerate

## Level 2: Understand

**Level Definition and Attributes:** Students are able to demonstrate understanding of facts and ideas by interpreting, exemplifying, classifying, summarizing, inferring, comparing and explaining main ideas.

**Active Verbs:** classify, compare, contrast, extend, demonstrate, explain, illustrate, infer, interpret, outline, relate, rephrase, show, summarize, select, translate, describe, paraphrase, ask, differentiate, discuss, express, distinguish, restate, group

## Level 3: Apply

**Level Definition and Attributes:** Students are able to solve problems in new situations by applying acquired knowledge, facts, techniques and rules in a different way.

**Active Verbs:** calculate, predict, apply, solve, illustrate, use, demonstrate, determine, model, build, construct, develop, experiment with, identify, make use of, organize, plan, select, solve, utilize

## Level 4: Analyze

**Level Definition and Attributes:** Students are able to examine and break information into parts by identifying motives, causes and relationships. They can make inferences and find evidence to support generalization.

**Active Verbs:** classify, outline, break down, categorize, analyze, diagram, illustrate, assume, compare, conclusion, contrast, discover, dissect, distinguish, divide, examine, function, inference, inspect, list, motive, relationships, simplify, survey, take part in, test for

## Level 5: Evaluate

**Level Definition and Attributes:** Students are able to present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. They can justify a decision or course of action.

**Active Verbs:** design, formulate, build, invent, create, compose, generate, derive, modify, develop, agree, appraise, assess, award, choose, compare, conclude, criteria, criticize, decide,

deduct, defend, determine, disprove, estimate, evaluate, explain, influence, judge, interpret, justify, mark, measure, perceive, prioritize, rate, recommend, rule on, select, support, value

### **Level 6: Create**

**Level Definition and Attributes:** Students are able to compile, generate or view information, ideas or products together in a different way by combining elements in a new pattern or by proposing alternative solutions.

**Active Verbs:** adapt, build, change, choose, combine, compile, compose, construct, create, delete, design, develop, discuss, elaborate, estimate, formulate, happen, imagine, improve, invent, make up, maximize, modify, originate, plan, predict, propose, solve, suppose, test, hypothesize, substitute, compile, develop, rearrange, anticipate, assemble, collaborate, collect, devise, imagine, intervene