



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



The Course Outcome (CO) to Program Outcome (PO) mapping is a crucial aspect of academic quality assurance, especially for accreditation purposes. This report outlines a systematic procedure to calculate CO-PO attainment using assessment data, surveys, and predefined mappings. An example with 10 students is used for illustration, and screenshots of relevant data and calculations are provided.

Procedure for CO-PO Calculation

Assessment data is gathered from multiple sources, such as:

Direct Source:

- Assignments /Design Projects / Research Presentations

- Mid Term Exam

- Group Projects or Presentations

End-Term Examinations **Indirect Source:**

- Course Exit Survey



Table 1. Course attainment Levels.

Assessment Methods	Attainment Levels	
Final Grade	Level 1	Less than 50% students scoring more than average% marks.

Level 2	50% to less than 60% students scoring more than average % marks.
Level 3	more than 60% students scoring more than average % marks in internal assessment tools

For example, the data from the "Mid- Term – M.Arch-UD " sheet is shown below:

SUSHANT UNIVERSITY

Mid Term - (Part-01) (Part-02) (Even Semester 2023-24)

Program: M.Arch - UD	Semester: IV	Assignment Date: 3/4/2024
Course Code: 19MEL-6CS22S	Course Name: Elective IV - Culture & Society	Faculty Name:

Aparajita										
S. No.	Enrolment No.	Student Name	Batch No	(Mid Term-Part -01) ASSIGNMENT - 01		(Mid Term-Part -02) ASSIGNMENT - 02	Attainment			Total Marks (40)
				CO1	CO2		CO1 (5)	CO2 (10)	CO3 (25)	
1	220MARCHUD001	ANUBHAV	2022-2024	4	9	23	4	9.0	23	36.0
2	220MARCHUD003	UJJWAL	2022-2024	3	8	23	3	8.0	23	34.0
3	220MARCHUD006	SHUBHANGI	2022-2024	3	8	23	3	8.0	23	34.0
4	220MARCHUD005	ABDUL	2022-2024	4	8	23	4	8.0	23	35.0
5	220MARCHUD002	AYUSH	2022-2024	4	8	23	4	8.0	23	35.0
6	220MARCHUD004	CHINTAN	2022-2024	4	8	22	4	8.0	22	34.0
Total Students										6

Aparajita



Total Students Appeared In Assignment 1&2 (N)					
Average					
Number of students scored average% and above marks (P)					
	4	8.0	23	35	
	4	6	5	6	
	66.67%	100.00%	83.33%		
CO attainment (P/N)*100					

Average Marks	Max Marks	Min. Marks	Std Deviation	Less than 40%
35	36	34	0.82	0.00%

MARKS RANGE	0-15	16-30	31-40
NO OF STUDENTS	0	0	6

Assessment Methods	Attainment Levels	
Assignment	Level1	Less than 50% students scoring more than average% marks.
	Level2	50% to less than 60% students scoring more



		than average % marks.	
	Level 3	more than 60% students scoring more than average % marks in internal assessment tools	

CO Attainment Level

COs	Attainment Level
CO1	3
CO2	3
CO3	3

Each assessment component contributes to specific Course Outcomes (COs). Weightages are assigned based on the relative importance of the assessment. These weightages are predefined and reflected in the "CO Direct Attainment" sheet, which aggregates scores from all assessments:

Direct attainment is calculated using the weighted averages of the scores from various assessments. The formulae for these calculations are embedded in the file and reflect:

Where S_{CO} is the student's score in the assessment contributing to the CO, and $Weightage$ is the corresponding weight.



SUSHANT UNIVERSITY

School of Art and Architecture

Result Analysis (Even Semester 2023-24)

Program:	M.Arch - UD	Sem:	IV
Course Name:	Elective-IV (Culture & Society)	Course Code:	19MEL-6CS22S
Faculty Name:	Aparajita Shrivastava	Date of Analysis:	5/22/2024

Consolidated CO Attainment (Internal)

Mid term 40			Total
COs	Assessment Tools		
		Mid-Term	
CO1		3	1.2
CO2		3	1.2
CO3		3	1.2
CO4		0	0

Consolidated CO Attainment (Internal)

COs	End Term 60		Total
	Assessment Tools		
	Mid-Term		
CO1			0
CO2			0
CO3		3	1.8
CO4		3	1.8

Consolidated CO Attainment (Internal+External)

Internal - Mid term 40 : End Term 60





COs	Internal (Mid term)	Internal (End term)	Total
CO1	1.2	0	1.2
CO2	1.2	0	1.2
CO3	1.2	1.8	3
CO4	0	1.8	1.8

Indirect attainment is derived from surveys, reflecting students' perceived achievement of the COs. These are combined with direct attainment to calculate overall CO attainment.

School of Art and Architecture- Sushant University, Gurugram									
Academic Year - Even Semester- 2023-24									
Course Exit Survey									
Program:	M.Arch-UD			Sem:			IV		
Course Name:	Elective-IV(Culture & Society)			Course Code:			19MEL-6CS22S		
Faculty Name:	Aparajita Shrivastava			Date of Survey:			5/22/2024		
Student Full Name	CO1			CO2			CO3		
	Course Exit survey parameter1	Attainment of CO1		Course Exit survey parameter2	Attainment of CO2		Course Exit survey parameter3	Attainment of CO3	
	ANUBHAV	Good	12	Excellent	20		Good	12	
	UJJWAL	Fair	8	Good	12		Good	12	
	SHUBHANGI	Fair	8	Good	12		Good	12	
							CO4		
							Course Exit survey parameter4	Attainment of CO4	
							Good	12	
							Fair	8	
							Fair	8	

ABDUL	Good	12	Excellent	20	Good	12	Good	12
AYUSH	Excellent	20	Excellent	20	Good	12	Good	12
CHINTAN	Good	12	Excellent	20	Good	12	Good	12
Average		12		17.33333333		12		10.66666667
No of students >=Avg		4		4				
Total students		6		6		6		4
Attainment Level (%)		66.67%		66.67%		100.00%		6
Attainment Level		3		3		3		66.67%

Assessment Methods	Attainment Levels		
Assessment	Level1	Less than 50% students scoring more than average % marks.	
	Level2	50% to less than 60% students scoring more than average % marks.	
	Level3	more than 60% students scoring more than average % marks in internal assessment tools	

SUSHANT UNIVERSITY

School of Art and Architecture

CO Attainment (Even Semester- 2023-24)

Program:

M.Arch

Sem:

2

Course Name:

Sustainable Urban Ext- Studio-II

Course Code:

23MUD-IDS12P

Faculty Name:

Aparajita Shrivastava

Date of Analysis:

6/7/2024



COs	Direct (80%)	Indirect (20%)	Total (100%)
CO1	2.25	3	2.4
CO2	2.25	3	2.4
CO3	2.25	3	2.4
CO4	2.55	3	2.64
CO5	2.55	3	2.64

Each CO is mapped to specific POs and PSOs with predefined weightages, which are documented in the "PO-PSO Attainment" sheet. An example of this mapping is shown below:

The overall attainment for each PO is calculated as a weighted sum of the CO contributions. This is summarized in the "PO-PSO Attainment" sheet.

SUSHANT UNIVERSITY									
School of Art and Architecture									
CO-PO-PSO Mapping (Even Semester - 2023-24)									
Program:	M.ARCH					Sem:	2		
Course	"Sustainable Urban Ext- Studio-II "					Course Code:	23MUD- IDS12P		
Name:						Date of			
Faculty:						Analysis:	6/7/2024		
Name:	Aparajita Shrivastava								



COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	
CO1	3	3	3	3	2	3	3	3	2	2	3	3	3	2	High relationship among CO-PO
CO2	3	3	3	3	2	2	3	3	2	2	3	2	3	3	Medium relationship among CO-PO
CO3	3	3	3	3	2	3	3	3	2	2	2	3	3	2	Low relationship among CO-PO
CO4	3	3	3	3	2	2	3	3	2	2	3	3	2	3	
CO5	3	3	3	3	3	2	3	3	2	2	3	2	3	3	
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	
CO1	5.52	7.2	7.2	7.2	4.8	7.2	7.2	7.2	4.8	4.8	7.2	7.2	7.2	4.8	2.4
CO2	7.2	7.2	7.2	7.2	4.8	4.8	7.2	7.2	4.8	4.8	7.2	4.8	7.2	7.2	2.4
CO3	7.2	7.2	7.2	7.2	4.8	7.2	7.2	7.2	4.8	4.8	4.8	7.2	7.2	4.8	2.4
CO4	7.2	7.2	7.2	7.2	4.8	4.8	7.2	7.2	4.8	4.8	7.2	7.2	4.8	7.2	2.64
CO5	7.92	7.92	7.92	7.92	5.28	5.28	7.92	7.92	5.28	5.28	7.92	7.92	5.28	7.92	2.64
Attainment	2.34	2.45	2.45	2.45	2.23	2.44	2.45	2.45	2.45	2.45	2.45	2.64	2.26	2.46	

This procedure ensures a structured approach to CO-PO attainment calculation, integrating both direct and indirect measures. By using systematic mapping and aggregation, institutions can effectively monitor and enhance the alignment of course outcomes with program objectives.

