VISAKHA GOVT. COLLEGE FOR WOMEN, VISAKHAPATNAM

Attainment of Program outcomes and Course outcomes

Outcome based education (OBE) is implemented in our institute from 2018-19. Workshops and Brainstorm sessions were conducted among faculty to frame **COs and PSOs** which in turn helps to set up the **POs** considering all Graduate Attributes

IQAC arranged various Training and Orientation programmes for Faculty enrichment and for reinforcing expectations of the Institution. These sessions help teachers focus on ways and means to attain performance targets, elements of quality, and standards for performance in order to improve classroom teaching and learning process.

Each course has a defined set of course outcomes and corresponding evaluation criteria. The course outcomes are mapped to the program outcomes which are used to provide the quantitative measurement of how well the program outcomes are achieved.

Procedure for Attainment Calculation

The course outcomes of each core course are mapped to the Program Outcomes with a level of emphasis being either strongly, moderately, leastly correlated or not correlated.

All the Course Outcomes of each course are mapped to Program outcomes by correlating on a scale from 0 to 3 where 0 indicates no correlation and 3 indicates strong correlation of Course outcome with the program outcome.

Sr.No	Correlation	Correlation Point
1	Strongly	3
2	Moderately	2
3	Leastly	1
4	No Correlation	0

The level of emphasis for an outcome used for assessing Correlated PO is decided by the average weightage of all Course outcome of a course for each Correlated PO

Example:

Subject	Computer Science - Course Outcomes								
CS-P1:Computer Fundamentals and Photoshop		CORRELATING PROGRAM OUTCOMES							
CO Code	**Course Outcome**	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**
CO1	Understand the evolution and functionality of a Digital Computer	3	2	1	1	1	2	1	2
CO2	Explore various Input/Output and memory devices	3	3	1	1	1	2	1	1
CO3	Appreciates Photoshop's beauty from the practical to the painterly artistic	3	2	3	2	1	3	2	2
CO4	Understand how Photoshop will help create own successful images	3	2	3	2	1	3	3	3
CO5	Able to work with various tools, layers and apply filters	3	3	1	2	1	3	3	2
CO6	Enhance their own creativity and Image editing skills	3	3	1	3	1	3	3	3
	Average Weightage	3	2.50	1.67	1.83	1	2.67	2.17	2.17

In keeping with the affiliating University's norms, the assessment of each course has Internal [of 25% weightage] and Semester End Examination (SEE) [of 75% weightage].

The Internal component is administered through two different modes.

1. Formal Internal Assessment - Mid Examinations (20%)- Two written examinations are conducted and its average marks are considered. The questions for two internal examinations and Assignments are framed in such a way to cover all course outcomes.
2. Informal Internal Assessment (5%) is based on Assignments, Projects, Quiz, Group Discussions, Student Seminars and other Co-curricular activities.

At the end of each program, the PO assessment is done from the CO attainment of all curriculum components. The level of attainment of Course Outcomes calculated using internal and external marks, which serves as a measure of the success of the teaching-learning process. The level of attainment of Course Outcomes is designated into four levels. The highest level is marked as 3 for score above 60, 2 for above 50, 1 for 35 and above and 0 indicating no attainment for below 35.

Sr.No	Marks Range	Level of Attainment
1	>60 and <=100	3
2	>50 and <=60	2
3	>=35 and <=50	1
4	No Correlation	0

The level of attainment of outcome of each Course is calculated as the average of the level of attainment of all students in that course. The attainment of PO is calculated as the product of the level of attainment of each Course and average weightage of Correlated POs for that course is summated for all courses and normalized by dividing with average weightage of POs correlation of all courses

Sample Outcome Attainment

Program Outcome Attainment of the program BSc-MPCS(Mathematics, Physics, Computer Science)

Assessment	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
Internal_DA	19.93	19.94	19.95	19.95	19.96	19.95	19.95	19.94
Internal_IDA	4.99	4.99	4.99	4.99	4.99	4.98	4.99	4.99
External	64.17	64.2	63.5	63.97	63.88	63.51	63.9	64.21
Total	89.09	89.13	88.44	88.91	88.83	88.44	88.84	89.14

In each Program, the level of attainment of each PO is compared with the predefined targets, if not achieved the Program coordinators take necessary steps for the improvement to reach the target.