



Course Outcomes & CO-PO-PSO Mapping and Justification

Table with 3 columns: Subject (DESIGN AND ANALYSIS OF ALGORITHMS), COURSE OUTCOMES, and CO No. with descriptions and Cognitive Levels (L2, L4).

CO-PO-PSO MAPPING

Mapping table with columns for CO No., PO1-PO12, and PSO1-PSO3, showing numerical values for each intersection.

CO-PO-PSO JUSTIFICATION

CO No.	PO/PSO	CL	Justification
15CS43.1	PO1	3	Strongly mapped as students will be able to gain the knowledge of asymptotic notations, divide and conquer.
	PO2	3	Strongly mapped as students will be able to analyze the algorithms of divide and conquer.
	PO3	1	Slightly mapped as students will be able to design new algorithms using divide and conquer technique.
	PO12	1	Slightly mapped as students will be able to apply the concept of divide and conquer technique in searching and sorting etc. problem types.
	PSO1	3	Strongly mapped as students will be able to apply the searching and sorting techniques in real world problems.
15CS43.2	PO1	2	Moderately mapped as students will be able to gain the knowledge of general plan of recursive and non-recursive algorithms and theory of backward substitution in divide and conquer technique.
	PO2	3	Strongly mapped as students will be able to analyze the time and space complexity of recursive and non-recursive algorithms.
	PO3	1	Slightly mapped as students will be able to design new algorithms using divide and conquer technique.
	PO12	1	Slightly mapped as students will be able to analyze the efficiency of any new algorithm designed by divide and conquer.
	PSO1	3	Strongly mapped as students will be able to apply the searching and sorting techniques in real world problems.
15CS43.3	PO1	2	Moderately mapped as students will be able to gain the knowledge of greedy method concepts.
	PO2	2	Moderately mapped as students will be able to analyze the time and space complexity of greedy algorithms.
	PO3	3	Strongly mapped as students will be able to design new algorithms using greedy technique.
	PO12	1	Slightly mapped as students will be able to analyze the efficiency of any new algorithm designed by greedy techniques.
	PSO1	3	Strongly mapped as students will be able to apply the greedy techniques in real world problems such as Resource management in software.
15CS43.4	PO1	2	Moderately mapped as students will be able to gain the knowledge of dynamic method concepts.

	PO2	2	Moderately mapped as students will be able to analyze the time and space complexity of dynamic programming algorithms.
	PO3	3	Strongly mapped as students will be able to design new algorithms using dynamic programming technique.
	PO12	1	Slightly mapped as students will be able to analyze the efficiency of any new algorithm designed by dynamic programming techniques.
	PSO1	3	Strongly mapped as students will be able to apply the dynamic programming techniques in real world problems such as TSP, reliability design.
15CS43.5	PO1	2	Moderately mapped as students will be able to gain the knowledge of backtracking, branch and bound concepts.
	PO2	2	Moderately mapped as students will be able to analyze the time and space complexity of backtracking, branch and bound algorithms.
	PO3	3	Strongly mapped as students will be able to design new algorithms using backtracking, branch and bound technique.
	PO12	1	Slightly mapped as students will be able to analyze the efficiency of any new algorithm designed by backtracking, branch and bound techniques.
	PSO1	3	Strongly mapped as students will be able to apply the backtracking, branch and bound in real world problems such as event scheduling, stratification of triangle meshes in computer graphics.

Prepared by

HoD

Kavitha Bai /Rosline Mary/Veena G

Dr.M.Ramakrishna