



VEMANA INSTITUTE OF TECHNOLOGY

Koramangala, Bengaluru - 34

Department of Computer Science & Engineering



Course Outcomes & CO-PO-PSO Mapping and Justification

Subject	SYSTEM MODELING & SIMULATION	15CS834
COURSE OUTCOMES		
CO No.	On completion of this course, students will be able to:	Cognitive Level
15CS834.1	Understand the concept of simulation, types of simulation models and discrete event simulation. Develop solutions for application problems using manual simulation and Time Advance algorithm on discrete event simulation.	L2
15CS834.2	Understand the concepts of Statistical models and queuing models.	L2
15CS834.3	Apply acceptance rejection technique and inverse transform technique to generate Random Variates and Random numbers using LCM.	L3
15CS834.4	Understand the useful model of input data, absolute performance and estimation with respect to output analysis.	L2
15CS834.5	Understand the model building, verification, calibration, validation of models and optimization.	L2

CO-PO-PSO MAPPING

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
15CS834.1	2	-	2	-	-	-	-	-	-	-	-	-	1	-	-
15CS834.2	2	3	-	-	-	-	-	-	-	-	-	-	1	-	-
15CS834.3	3	-	2	-	-	-	-	-	-	-	-	-	1	-	-
15CS834.4	2	-	2	-	-	-	-	-	-	-	-	-	1	-	-
15CS834.5	3	-	-	-	-	-	-	-	-	-	-	-	1	-	-
15CS834	2.4	3.0	2.0	-	-	-	-	-	-	-	-	-	1		

CO-PO-PSO JUSTIFICATION

CO No.	PO/PSO	CL	Justification
15CS834.1	PO1	2	Moderately mapped as students gain the knowledge on simulation, types of simulation models and discrete event simulation
	PO3	3	Strongly mapped as students can use the knowledge gained to solve application problems using manual simulation and Time Advance algorithm on discrete event simulation.
	PSO1	1	Slightly mapped as acquired knowledge helps students to solve problems using manual simulation.
15CS834.2	PO1	2	Moderately mapped as students gain the knowledge on Statistical models and queuing models.
	PO2	3	Strongly mapped as students can able to identify and formulate complex engineering problem.
	PSO1	1	Slightly mapped as acquired knowledge helps students to analyze the applications using various distributions.
15CS834.3	PO1	3	Strongly mapped as students gain the knowledge to generate Random Variates and Random numbers.
	PO3	2	Moderately mapped as students can use the knowledge gained to solve application using various techniques.
	PSO1	1	Slightly mapped as acquired knowledge helps students to use various techniques, to generate Random Variates and Random numbers.
15CS834.4	PO1	2	Moderately mapped as students gain the knowledge on input and output data analysis.
	PO3	2	Moderately mapped as students can use the knowledge gained to measure absolute performance and estimation.
	PSO1	1	Slightly mapped as acquired knowledge helps students to analyze input data model.
15CS834.5	PO1	3	Strongly mapped as students gain the knowledge to model building, verification, calibration, validation of models and optimization.
	PSO1	1	Slightly mapped as acquired knowledge helps students can validate and optimize the models.

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