

## INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous) Dundigal, Hyderabad - 500 043

## ELECTRONICS AND COMMUNICATION ENGINEERING

## ATTAINMENT OF COURSE OUTCOME- ACTION TAKEN REPORT

Name of the Faculty:	Ms G. Mary Swarna latha	Department:	ECE	
Regulation:	IARE-R16	Branch:	2017-2021	
Course Name:	Probability Theory and Stochastic Processes	Course Code:	AEC003	
Semester:	III	Target Value:	60% (1.8)	

## **Attainment of COs:**

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observations
CO1	Infer the concepts of the random experiment, event probability, joint event probability, and conditional event probability for proving the Bayes theorem and for computing complex event probabilities and independence of multiple events.	1.6	2.3	1.7	Attainment target is not reached
CO2	Explain the concept of random variable, the probability distribution function, probability density function and operations on single random variable to analytically derive the moments.	1.6	2.3	1.7	Attainment target is not reached
CO3	Develop joint distribution, density function, expectation operator and transformations for multiple random variables using the concept of single random variable.	1.3	2.3	1.5	Attainment target is not yet reached
CO4	Extend the random variable concept to random process and its sample functions for demonstrating the time domain and frequency domain characteristics.	1.6	2.3	1.7	Attainment target is not yet reached
CO5	Develop analytically the auto-power and cross- power spectral densities to solve the related problems of random processes using correlation functions and the Fourier transform.	1.6	2.2	1.7	Attainment target is not reached
CO6	Analyze the response of a linear time invariant (LTI) system driven by stationary random processes using the time domain and frequency domain description of random processes.	0.6	2.2	1.5	Attainment target is not reached

Action Taken Report: (To be filled by the concerned faculty / course coordinator)

CO 1: Conducting Guest lecture on basic concepts of probability and random process

stochastic processes and spectral characteristics.

CO2: Providing more information and assignments on random variable, the probability distribution function, probability density function and operations

CO 3: Providing more information and assignments on probability distribution and density functions

CO 4: Conducting tutorial classes on random process and its sample functions for demonstrating the time domain and frequency domain characteristics.

CO 5: Presenting video lectures on analytically the auto-power and cross- power spectral densities to solve the related problems of random processes.

CO 6: Additional inputs will be provided on stationary random processes using the time domain and frequency domain description of random processes.

Head of the Department Electronics and Communication Engineering INSTITUTE OF AERONAUTICAL ENGINEERING

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