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	Batch:	2016-2020
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.	1.60	2.60	1.8	Attained
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.	1.60	2.70	1.8	Attained
CO3	Develop joint distribution, density function, expectation operator and transformations for multiple random variables using the concept of single random variable.	2.30	2.80	2.4	Attained
CO4	Extend the random variable concept to random process and its sample functions for demonstrating the time domain and frequency domain characteristics.	2.30	2.60	2.4	Attained
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.	1.60	2.80	1.8	Attained
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.	1.60	2.60	1.8	Attained

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

In this Course, the CO1, CO2, CO3, CO5 and CO6 requires additional attention and it is improved by

1. Conducting Guest lectures on stochastic processes and spectral characteristics.

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

3. Giving assignments and conducting tutorials on relationship between power spectrum and autocorrelation function.

Course Coordinator   Mentor   HOD