

**MECHANICAL ENGINEERING****ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT**

Name of the faculty:	Mr. G SATYANARAYANA	Department:	Mechanical Engineering
Regulation:	IARE - R20	Batch:	2021-2025
Course Name:	Linear Algebra and Calculus	Course Code:	AHSC02
Semester:	I	Target Value:	60% (1.8)

Attainment of COs:

	Course Outcome	Direct attainment	Indirect attainment	Overall attainment	Observation
CO1	Compute the rank and inverse of real and complex matrices with elementary transformation methods.	1.60	2.00	1.7	Not Attained
CO2	Use the Eigen values, Eigen vectors for developing modal and Spectral matrices from the given matrix.	1.30	2.00	1.4	Not Attained
CO3	Make use of Cayley Hamilton theorem for finding positive and negative powers of the matrix.	0.90	2.00	1.1	Not Attained
CO4	Utilize the mean-value theorems and partial derivatives in estimating the extreme values for functions of several variables.	0.60	2.00	0.9	Not Attained
CO5	Solve the Second and higher order linear differential equations with constant coefficients by using substitution method and method of variation of parameters.	0.60	2.00	0.9	Not Attained
CO6	Apply the Fourier Series expansion of periodic, even and odd functions in analyzing the square wave, sine wave rectifiers.	0.60	2.00	0.9	Not Attained

Action Taken:

- CO1: More assignments may be given on finding the rank and inverse of real and complex matrices with elementary transformation methods
- CO2: More problems may be solved on the application of Eigen values, and Eigen vectors for developing modal and Spectral matrices from the given matrix.
- CO3: More exercises may be given on the application of Cayley Hamilton theorem for finding positive and negative powers of the matrix.
- CO4: More problems can be solved on application of the mean-value theorems and partial derivatives in estimating the extreme values for functions of several variables
- CO5: More examples are to be solved on the Second and higher order linear differential equations with constant coefficients by using substitution method and method of variation of parameters.
- CO6: More assignments can be given on the application of the Fourier Series expansion of periodic, even, and odd functions in analyzing the square wave, and sine wave rectifiers.


Course Coordinator

Mentor

Head of the Department

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