COURSE CODE	COURSE NAME	CO	CO STATEMENT
C101	English-1	C101.1	Acquired listening, speaking, reading and writing skills necessary for the survival in the postmodern society through task-based and skill-based communication practices with judicious integration of modern tools.
		C101.2	Realisation of technical communicative competence and attainment of group dynamism and problem solving skills through standard oral and written language models.
		C101.3	Development of fluency and accuracy for effective and professional communication in real-time situations by using appropriate verbiage and contextual knowledge.
		C101.4	Imbibed lifelong reading habit among the learners to grow both professionally and socially with ethical principles and values.
		C101.5	Application of own ideas as informed opinions that are in dialogue with a larger community of interpreters, and understand how their own approach compares to the variety of critical and theoretical approaches.
		C101.6	Demonstration of intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.
C102	Mathematics - I	C102.1	Identify and solve the first order differential equations. Able to model the real world problems using differential equations and analyze their solutions
		C102.2	Solve the higher order linear differential equations and model the electrical circuits using

			differential equations.
		C102.3	Understand and determine Laplace and Inverse Laplace transform of certain functions and solve an initial value problem for a differential equation using Laplace transform.
		C102.4	Acquire knowledge on partial differentiation and calculate total derivative, Jacobian and Maxima and Minima of function of several variables.
		C102.5	Form a partial differential equation and solve first order linear and non-linear partial differential equations.
		C102.6	Solve higher order homogeneous partial differential equations using method of separation of variables and apply these techniques to solve heat equation and wave equation.
C103	Mathematics – II	C103.1	Understand the basic numerical methods and capable to solve and develop an algorithm for algebraic and transcendental equations.
		C103.2	Skill to Understand the interpolation methods and find the interpolation polynomials/values for the given data by the suitable interpolation method.
		C103.3	Able to apply numerical integration to evaluate definite integral and solving ordinary differential equations by using Taylor's series, Picard's method, Euler's method, Modified Euler's method and Runge-Kutta method.
		C103.4	Skill to find the Fourier series of different functions.
		C103.5	Understand the concept of Fourier transforms and find Fourier transforms for different functions.

		C103.6	Interpret to apply Z-transforms for the engineering problems like– properties – Damping rule – Shifting rule – Initial and final value theorems -Inverse z transform- -Convolution theorem – Solution of difference equation by Z -transforms
C104	Engineering Physics	C104.1	Apply the basic principles and properties of light to construct and understanding the working mechanism of instruments such as Interferometer, Diffractometer and Polarimeter. (**RBT Levels: 2. Understand & 3. Apply**)
		C104.2	Describe the applications of lasers by utilizing its characteristic properties and principles. (**RBT Levels: 1. Remember & 3. Apply**)
		C104.3	Explore the applications of optical fiber (**RBT Levels: 1. Remember & 3. Apply**)
		C104.4	Discuss the propagation of EM fields in isotropic & dielectric medium by observing their response to different materials. (**RBT Level 2:Understand**)
		C104.5	Classify the solid state materials based on the band theory by applying the principles of Quantum Mechanics & free electron theory. (**RBT Level 4: Analyze**)
		C104.6	Identify the given semiconductor by studying its charge carriers through the Hall effect. (**RBT Level: 2.Understand**)
C105	Professional Ethics and Human Values	C105 .1	Ensures engineers sustained happiness through identifying the essentials of human values and skills.
		C105 .2	Produce knowledge among students about relational ship Engineering and professional

			ethics
		C105 .3	Evaluate practically the importance of Engineering profession and enriching interaction with Engineer and society.
		C105 .4	Provide appropriate knowledge for the safety and health of employees.
		C105 .5	Harmony in professional and personal life.
		C105 .6	Guide Engineer as a global problem solver and sustain in the cross cultural environment
C106	Engineering Drawing	C106. 1	Describe the construct polygons , curves and scales
		C106. 2	Impart the significance of projection of points and lines
		C106. 3	Understand to draw orthographic projections of lines inclined to both planes
		C106. 4	Understand to draw the projection of planes
		C106. 5	Understand to draw the projection of solids
		C106. 6	Impart the visualization of 3D –objects and draw the orthographic, isometric views
C107	English - Communication Skills Lab -1	C107.1	Enabling students to use Computer assisted Language Laboratory (CALL) to enhance their pronunciation through stress, intonation and rhythm for routine and spontaneous interaction
		C107.2	Attainment of communicative competence for the fulfilment of academic, professional and social purposes.
		C107.3	Attainment of language Proficiency through Contextualized, Task Based Activities to realize employment potential at the end of the course.
		C107.4	Acquired listening, speaking, reading and writing skills necessary for the survival in the postmodern society through task-based and skill-based communication practices with

			judicious integration of modern tools.
		C107.5	Development of fluency and accuracy for effective and professional communication in real-time situations by using appropriate verbiage and contextual knowledge.
		C107.6	Realisation of technical communicative competence and attainment of group dynamism and problem solving skills through standard oral and written language models.
C108	Engineering Physics Laboratory	C108.1	Identify the working principles of laboratory experiments in optics, mechanics, electromagnetic and electronics.
		C108.2	Apply the working principles of laboratory experiments in optics, mechanics, electromagnetic and electronics and perform the experiments using required apparatus.
		C108.3	Compute the required parameter by suitable formula using experimental values (observed values) in mechanics, optics, electromagnetic and electronic experiments.
		C108.4	Analyze the experimental results through graphical interpretation.
		C108.5	Recognize the required precautions to carry out the experiment and handling the apparatus in the laboratory.
		C108.6	Demonstrate the working principles, procedures and applications.
C109	Engineering Workshop& IT Workshop	C109.1	Student should able to Understand the basics of carpentry and able to make different carpentry joints.
		C109.2	Student should able to Understand the basics of fitting and able to make different fits.
		C109.3	Student should able to Understand the basics of black smithy and able to make different forged jobs.

		C109.4	Student should able to Understand the basics of house wiring and able to make different house wiring techniques used in our daily life.
		C109.5	Student should able to Understand the basics of tin smithy and able to make different jobs by using GI-sheet.
		C109.6	Student should able to use the basic tools used in different trades in engineering workshop.