

COURSE CODE	COURSE NAME	CO	CO STATEMENT
C110	English – II	C110.1	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.
		C110.2	Realisation of technical communicative competence and attainment of group dynamism and problem solving skills through standard oral and written language models.
		C110.3	Development of fluency and accuracy for effective and professional communication in real-time situations by using appropriate verbiage and contextual knowledge.
		C110.4	Imbued lifelong reading habit among the learners to grow both professionally and socially with ethical principles and values.
		C110.5	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.
		C110.6	Demonstration of intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.
C111	Mathematics – III	C111.1	Determine the rank of a matrix by reducing to echelon form, normal form & solve system of simultaneous linear equations and apply these methods to find the current in electrical circuits using matrices.
		C111.2	Solve the problems related to Eigen values & Eigen vectors of a given matrix, determine the

			inverse and powers of a matrix using Cayley – Hamilton theorem and identify the rank, nature and index of a Quadratic form.
		C111.3	Identify the given curve by interpreting different properties of the curve. Able to determine Double integral over a surface and triple integral over a volume and find the lengths, surface areas and volumes of solids using double and triple integrals.
		C111.4	Understand Beta & Gamma functions and able to evaluate improper integrals using beta, gamma functions
		C111.5	Find the gradient of a scalar function, divergence & curl of a vector function and determine normal, flux and scalar potential using vector differentiation.
		C111.6	Determine line, surface and volume integrals and able to verify Green's, Stoke's and Gauss divergence theorems
C112	Engineering Chemistry	C112.1	The impurities present in raw water, problems associated with hard water in industries and how to avoid them are understood. The students would be aware of different types of sterilization methods to get the drinking water.
		C112.2	The students able to construct the Electro chemical cell and develop different types of battery cells like organic, inorganic, fuel cells.
		C112.3	Creating awareness on problems created by corrosion of metals and its control methods
		C112.4	Usage of plastics not only in household appliances and also used as composites in automotive industries, bio plastic in surgeries. The students able to design FRP, Biodegradable polymers and Usage of conducting polymers as battery cells.

		C112.5	The students should know the importance of solid, liquid, gaseous fuels and also significant with the problems associated with impurities present in the fuel which leads to knocking in engines.
		C112.6	The students would be able to design ,develop advanced engineering materials like Nano materials, Refractories, Insulators, FRP, Liquid crystals and its applications like Nano chips, Nano paints, solar cells etc.
C113	Engineering Mechanics	C113.1	To find the resultant of any number of forces and can apply friction concept for a given body. (RBT Level 4: Analyze)
		C113.2	To draw free body diagram for a given body can calculate the forces in members of the truss. (RBT Level 4: Analyze)
		C113.3	To find the centroid and center of gravity of composite sections. (RBT Level 4: Analyze)
		C113.4	To evaluate and find the moment of inertia of composite sections. (RBT Levels 2:Understand & Evaluate & 4: Analyze)
		C113.5	To analyze the motion of the bodies and the forces causing the motion. (RBT Level 4: Analyze)
		C113.6	To apply Work-Energy and Impulse-Momentum equations to find out the different parameters. (RBT Level : 3. Apply & Level 4: Analyze)
C114	Computer Programming	C114.1	Understand the basic terminology used in computer programming and Write, compile and debug programs in C language.
		C114.2	Analyze, design and develop programs involving decision structures, loops, arrays.

		C114.3	Analyze, design and develop programs involving modularization.
		C114.4	Developing the programs using dynamic memory concepts using pointers.
		C114.5	Design and develop programs using different user defined data types
		C114.6	Analyze ,Design and develop file handling programs
C115	Network Analysis	C115.1	Students are able to understand the basic laws and how to use them for the calculation of branch currents and voltages
		C115.2	Students are able to understand the exact meaning of R L C elements and the concept of impedance
		C115.3	Students are able to understand the behaviour of inductor for ac excitation
		C115.4	Students can easily solve any complex network by reducing it to its equivalent
		C115.5	Students are able to calculate the network parameters of any give network
		C115.6	Students are able to understand the steady state and transient states
C116	Engineering Chemistry Laboratory	C116.1	Enabling students to use Computer assisted Language Laboratory (CALL) to enhance their pronunciation through stress, intonation and rhythm for routine and spontaneous interaction
		C116.2	Attainment of communicative competence for the fulfilment of academic, professional and social purposes.
		C116.3	Attainment of language Proficiency through Contextualized, Task Based Activities to realize employment potential at the end of the course.
		C116.4	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.
		C116.5	Development of fluency and accuracy for effective and professional communication in real-time situations by using appropriate verbiage and contextual knowledge.
		C116.6	Realisation of technical communicative competence and attainment of group dynamism and problem solving skills through standard oral and written language models.
C117	English - Communication Skills Lab -2	C117.1	Identify the working principles of acid-base, redox, complexometric, conductometric, potentiometric titrations.
		C117.2	Apply the working principles of acid-base, redox, complexometric, conductometric, potentiometric titrations to perform the experiments using required apparatus.
		C117.3	Compute the required parameter by suitable formula using experimental values (observed values) of acid-base, redox, complexometric, conductometric, potentiometric titrations.
		C117.4	Analyze the experimental results through percentage of error.
		C117.5	Recognize the required precautions to carry out the experiment and handling the apparatus in the laboratory.
		C117.6	Demonstrate the working principles, procedures and applications in acid-base, redox, complexometric, conductometric, potentiometric titrations.
C118	Computer Programming Lab	C118 .1	Apply and practice logical ability to solve the problems.
		C118 .2	Understand and use C programming development environment to develop C programs.
		C118 .3	Understand and apply the knowledge of arrays and strings
		C118 .4	Analyzing the complexity of problems, Modularize the problems into small modules and

			then convert them into programs.
		C118 .5	Understand and apply User defined data types, the pointers, memory allocation techniques and use of files for dealing with variety of problems.