Course Outcomes

SNO	Course Outcomes Statement	Taxonomy
SPECIFIC LEARNING OUTCOMES – ALGEBRA & CALCULUS		
C111.1	Solve linear system of equations and calculate the Eigen values and Eigen vectors of the given square matrices.	Apply
C111.2	Apply Cayley – Hamilton theorem to find the inverse and powers of a square matrix and discuss the nature of the quadratic forms.	Apply
C111.3	Analyze mean value theorems to the given function.	Analyze
C111.4	Utilize the technique of partial differentiation to find the Jacobian and the extreme values of functions of several variables.	Apply
C111.5	Apply the techniques of multiple integrals to find the areas and volumes.	Apply
C111.6	Calculate the values of improper integrals using Beta and Gamma functions.	Apply
SPECIFIC LEARNING OUTCOMES –CHEMISTRY		
C112.1	Explore the band theory of solids for conductors, semiconductors, insulators, the magnetic behavior and colour of complexes. To apply molecular orbital energy level diagram of different molecular species	Understand
C112.2	Differentiate the electrochemical sources of energy	Understand
C112.3	Explore the engineering application of polymeric materials and the basic principle of polymers.	Understand
C112.4	Express the principles of different analytical instruments	Understand
C112.5	Express the principle of supramolecular chemistry in application of molecular machines and switches	Understand
C112.6	Differentiate the materials of construction for battery and electrochemical sensors	Understand
SPECIFIC LEARNING OUTCOMES – PROBLEM SOLVING & PROGRAMMING		
C113.1	Demonstrate the basic working of a Computer and Solve various problems using algorithmic approach.	Apply
C113.2	Analyse and select appropriate control structure to infer the problem.	Analyse
C113.3	Develop Solutions based on Modular approach for efficient debugging.	Create
C113.4	Estimate efficient memory utilization using pointers.	Evaluate
C113.5	Design solutions that handles heterogeneous data	Create
C113.6	Choose appropriate sorting algorithm based on the type data.	Analyse
SPECIFIC LEARNING OUTCOMES –ENGINEERING GRAPHICS LAB		
C114.1	Draw the various curves applied in engineering	Understand
C114.2	Show projections of solids and sections graphically	Understand

C114.3	Draw the development of surfaces of solids	Apply
C114.4	Use computers as a drafting tool	Understand
C114.5	Draw isometric drawings using CAD package	Apply
C114.6	Draw orthographic drawings using CAD package	Apply

SPECIFIC LEARNING OUTCOMES – ENGINEERING WORKSHOP

C115.1	Perform various basic House Wiring techniques such as connecting one lamp with one switch, connecting two lamps with one switch, connecting a fluorescent tube, Series wiring, Go down wiring.	understand
C115.2	Model different prototypes in the carpentry trade such as half-lap joint, Mortise -Ten on joint and Dove tail joint.	Apply
C115.3	Make various basic prototypes in the trade of Tin smithy such as rectangular tray, open Cylinder and funnel.	Apply
C115.4	Model various basic prototypes in the trade of fitting such as Straight fit, V- fit and half round fit.	Apply
C115.5	Know how much time a job will take for the assessment of time.	Analyse
C115.6	Repair the punctured tyre of a bicycle and change of two-wheelertyre.	understand

SPECIFIC LEARNING OUTCOMES –CHEMISTRY LAB

C116.1	Determine the strength of an acid by Conduct metric titrations	Apply
C116.2	Determinethe cell constant and conductance of solutions by conductometry	Apply
C116.3	Synthesize of advanced polymer materials	Create
C116.4	Measure the strength of an acid present in secondary battery	Evaluate
C116.5	Determine the potentials and EMFs of solutions by Potentiometer	Apply
C116.6	Analysethe IR and NMR of some organic compounds	Analyse

SPECIFIC LEARNING OUTCOMES –   PROBLEM SOLVING & PROGRAMMING LAB

C117.1	Choose appropriate control structures to solve given problem.	Analyse
C117.2	Design solutions for problems using arrays	Create
C117.3	Examine different sorting and searching algorithms	Apply
C117.4	Assess the utilization of memory using pointers	Evaluate
C117.5	Design and implement algorithms for linked lists.	Create
C117.6	Develop programs that emphasize storage classes.	Create

SPECIFIC LEARNING OUTCOMES – APPLIED PHYSICS

C112.1	Describe the importance of Interference, Diffraction and Polarization and the engineering applications as well	Understand
C112.2	Explain the dielectric and magnetic materials and applications in emerging micro device	Understand
C112.3	Demonstrate the electromagnetic wave propagation and optical fibers in various medical and communication fields	Apply
C112.4	Illustrate the functioning of semiconductors in electronic devices	Apply
C112.5	Discuss the principles and theory related to superconductors and explore their technological applications	Understand
C112.6	Integrate various properties of nanomaterial's and their usage in other engineering branches	Create

SPECIFIC LEARNING OUTCOMES –COMMUNICATIVE ENGLISH 1		
C114.1	Illustrate academic lectures and English spoken by Native speakers for better.	Apply
C114.2	Analyse reading strategies for comprehension for academic texts.	Analyse
C114.3	Develop better speaking skills through participation in activities such as role plays, group discussions and structured talks/oral presentations.	Create
C114.4	Analyse effective strategies for good writing while summarizing, writing essays.	Analyse
C114.5	Interpret grammatical structures and vocabulary and their appropriate use in speech and writing.	Understand
C114.6	Evaluate text and identify errors of grammar.	Evaluate
SPECIFIC LEARNING OUTCOMES – ELECTRONICS & COMMUNICATION ENGINEERING WORKSHOP		
C115.1	Identify discrete components and ICs	Apply
C115.2	Assemble simple electronic circuits over a PCB	Apply
C115.3	Testing of various components	Analyse
C115.4	Interpret specifications (ratings) of the component	Analyse
C115.5	Demonstrate disassembling and assembling a Personal Computer and make the computer ready to use	Apply
C115.6	Make use of Office tools for preparing documents, spread sheets and presentations	Create
SPECIFIC LEARNING OUTCOMES – APPLIED PHYSICS LAB		
C116.1	Operation of different optical instruments	Skills development
C116.2	Calculate the Dielectric constant	Analyse
C116.3	Calculate the Numerical aperture using optical fiber	Analyse
C116.4	Form Newton rings using interference pattern	Create
C116.5	Wavelength of light of given light source using normal incidence method	Apply
C116.6	Find the thickness of thin wire using Wedge method	Apply
SPECIFIC LEARNING OUTCOMES - COMMUNICATIVE ENGLISH 1 LAB		
C118.1	Differentiate various accents spoken by foreign speakers.	Understand
C118.2	Apply suitable reading strategies for comprehension of texts on monitor to get general idea and locate specific information.	Apply
C118.3	Compose talks extemporarily by practicing talks on general topics.	Create
C118.4	Analyse effective strategies for good writing a summary while listening to lectures.	Analyse
C118.5	Interpret techniques and strategies of Paraphrasing and précis writing.	Understand
C118.6	Evaluate text and identify errors of grammar.	Evaluate