LENDI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Autonomous)
(Approved by A.I.C.T.E & Affiliated to JNTU, Kakinada)
Accredited by NAAC with "A" Grade & NBA
Jonnada (Village), Denkada (Mandal), Vizianagaram Dist – 535 005
Phone No. 08922-241111, 241112
E-Mail: lendi_2008@yahoo.com Website: www.lendi.org

DEPARTMENT OF SCIENCE AND HUMANITIES

List Of Course Outcomes (CO)

Regulations: R20 **Branch: EEE**

COURSECODE &NAME	CO	CO STATEMENT
SEMESTER-1(I-I)-R20		
C101 Communicative English	**C101.1**	Understand the value of Human Conduct for career development through life skills: Ethics & Values and use root words and Prepositions without errors. Gain reading skills for comprehension, specific information, gist, and pleasure through extensive reading. Enhance pronunciation with befitting tone for clarity in a speech to communicate language effectively.
	C101.2	Observe the significance of imagery in poetry to use it in real-time contexts and learn to use and misuse of Articles, Prefixes, Suffixes, and Punctuations. Gain reading skills for comprehension, specific information, gist, and pleasure through extensive reading. Participate in short conversations in routine contexts on topics of interest and ask questions and Make requests politely.
	C101.3	Acquire conversation skills through drama and enhance the correct use of Nouns, Pronouns, Verbs and Concord to write paragraphs effectively. Gain reading skills for comprehension, specific information, gist, and pleasure through extensive reading. Listen for specific information, gist, note-taking, note-making and comprehension and develop convincing and negotiating skills through debates.
	C101.4	Develop reading for inspiration, interpretation & innovation and learn to use modifiers, synonyms and antonyms to write essays effectively. Gain reading skills for comprehension, specific information, gist, and pleasure through extensive reading
	C101.5	Learn meaningful use of language by avoiding meaningless cliches, bureaucratic euphemisms and academic jargon in order to acquire the skill of summarizing. Gain reading skills for

		comprehension, specific information, gist, and pleasure through extensive reading
C102 Numerical Method and Ordinary Differential Equations	**C102.1**	*Apply* numerical methods and implement interpolation techniques to solve real-world problems in engineering.
	C102.2	*Apply* numerical methods to solve ordinary differential equations that arise in various engineering fields.
	C102.3	*Apply* the first order ordinary differential equations to solve various engineering problems.
	C102.4	*Apply* the higher order ordinary differential equations to solve various engineering problems.
	C102.5	*Apply* the Laplace transform to solve differential equations and integral equations that arise in various engineering fields.
C103 Engineering Chemistry	**C103.1**	*Distinguish* thermoplastics and thermosetting plastics.
	C103.2	*Design* the metallic materials to prevent the corrosion.
	C103.3	*Discuss* the working principle and applications of primary, secondary battery cells, fuel cells and Photo Voltaic Cell.
	C103.4	*Compare* the working principle and materials used in Floppy, CD and pen drive & explain the applications of semiconductors and superconductors.
	C103.5	*Illustrate* the preparation, properties and applications of Nano materials and importance of liquid crystals.
C104 Computer Programming In C	**C104.1**	*Acquire* the knowledge on basic computer components, algorithms and flowcharts.
	C104.2	*Develop* C Programs using control and iterative statements.
	C104.3	*Develop* C programs using Arrays and pointers.
	C104.4	*Apply* the knowledge of strings and functions in programming.
	C104.5	*Comprehend* structures and unions.
C105 Engineering Drawing	**C105.1**	*Apply* the basics of engineering drawing to construct the polygons, curves and orthographic projections of points.
	C105.2	*Depict* the orthographic projections of straight lines in various orientations relative to reference planes.
	C105.3	*Draw* the projections of regular planes in various orientations relative to the reference planes.
	C105.4	*Construct* the projections of various solids, including polyhedral and solids of revolution, in different orientations relative to the reference planes.
	C105.5	*Convert* isometric views into orthographic views, and vice versa.
C106 Engineering Chemistry Lab	**C106.1**	*Explain* the functioning of the instruments such as Conductivity and pH meters.
	C106.2	*Interpret* the graphical values to analyze the experimental results.
	C106.3	*Determine* the concentrations of Acid, Zinc and Copper.
	C106.4	*Prepare* polymers and nano materials.
	C106.5	*Identify* the safety precautions to carry out the experiments in the

		laboratory using chemicals.
C107 Computer Programming In C Lab	**C107.1**	*Learn* Basic computer Installations and Office Tools, Document and present the algorithms, flowcharts and programs in form of user-manual and also apply and practice logical ability to solve the problems.
	C107.2	*Understand* C programming development environment and also how to compiling, debugging, and linking a Program using C Language.
	C107.3	*Apply* arrays, strings concepts to solve problems.
	C107.4	*Understand* and apply the in-built functions and customized functions for solving the problems.
	C107.5	*Understand* and apply the pointers, memory allocation techniques and use of files for dealing with variety of problems.
C108 Electrical Engineering Workshop	**C108.1**	*Explain* the limitations, tolerances, Safety aspects of electrical systems and wiring.
	C108.2	*Select* wires/cables and other accessories used in different types of wiring.
	C108.3	*Make* simple lighting and power circuits.
	C108.4	*Measure* current, voltage and power in a circuit.
	C108.5	*Apply* starting methods to AC and DC Machines.
SEMESTER- 2 (I-II)-R20		
C109 Linear Algebra and Multivariable Calculus	**C109.1**	Apply the matrix algebra techniques to engineering applications.
	C109.2	Apply the concepts of eigen values and eigen vectors to free vibration of a two-mass system.
	C109.3	Apply partial differentiation to find maxima and minima of functions of several variables
	C109.4	Evaluate the volume and surface area of solids using multiple integrals.
	C109.5	Apply vector differential operators to find potential functions and estimate the work done against a field, circulation and flux using vector integral theorems.
C110 Mathematical Techniques	**C110.1**	*Apply* mean value theorems to real world problems.
	C110.2	*Apply* Z-transforms to solve various engineering problems.
	C110.3	*Apply* Fouroer series to practical harmonic Analysis.
	C110.4	*Evaluate* Fourier transform of a function.
	C110.5	*Apply* the partial differential equations to solve various engineering problems.
C111 Applied Physics	**C111.1**	Interpret the interaction of optic energy with matter on the basis of interference.
	C111.2	Explain the principles of diffraction of light by using diffraction grating.
	C111.3	Apply the principles of polarization and Lasers to computer

		science engineering.
	C111.4	Enumerate the applications of Fiber Optics to computer science engineering.
	C111.5	Identify the principles of Quantum computing based on Quantum Physics.
C112 Electric Circuit Analysis-I	**C112.1**	*Understands* V-I relationships of basic circuit elements and network reduction techniques.
	C112.2	*Determine* of co-efficient of coupling for a given magnetic circuit.
	C112.3	*Analyses* single phase ac circuits and understands concepts of phase and power factor.
	C112.4	*Extends* knowledge of dc analysis to ac circuits and determines selectivity of a RLC resonant circuit.
	C112.5	*Simplify* complex electrical networks by using various network theorems.
C113 Thermal and Hydro Prime Movers	**C113.1**	*Classify* internal combustion engine and Evaluate the performance of IC engines.
	C113.2	*Estimate* the performance of a steam turbine using vapour power cycles and velocity diagrams
	C113.3	Students *apply* thermodynamic principles to analyze gas turbine efficiency and performance.
	C113.4	*Apply* the concepts of momentum equation for finding the forces acting on the vanes of the turbines, centrifugal pump.
	C113.5	*Calculate* the performance characteristics of a hydraulic turbine at different loads.
C114 Communicative English Lab	**C114.1**	Acquire Listening skills for answering questions, make formal presentations without graphical elements, prioritize information from reading texts, paraphrase short academic texts and get awareness about plagiarized content and academic ethics.
	C114.2	Comprehend academic lectures by taking notes, make formal presentations on academic topics using PPT slides with relevant graphical elements, distinguish facts from opinions while reading, write formal letters and emails and use a range of vocabulary in formal speech and writing.
	C114.3	Participate in group discussions using appropriate language strategies, comprehend complex texts, produce logically coherent argumentative essays and use appropriate vocabulary to express ideas and opinions.
	C114.4	Draw inferences and conclusions using prior knowledge and verbal cues, express thoughts and ideas accurately and fluently, develop advanced reading skills for a deeper understanding of texts, prepare a CV with a cover letter to seek internship/ job, and understand the use of passive voice in academic writing.
	C114.5	Develop advanced listening skills for an in-depth understanding of academic texts, make presentations collaboratively,

		understand the structure of Project Reports and use grammatically correct structures with a wide range of vocabulary.
C115 Applied Physics Lab	**C115.1**	*Apply* the working principles of laboratory experiments in optics, electrical and electronics.
	C115.2	*Compute* the required parameter by suitable formula using experimental values (observed values) in optics, electrical and electronic experiments.
	C115.3	*Analyze* the experimental results through graphical interpretation.
	C115.4	*Recognize* the required precautions to carry out the experiment and handling the apparatus in the laboratory.
	C115.5	*Demonstrate* the working principles, procedures and applications.
C116 Engineering Workshop &IT Workshop	**C116.1**	*Apply* wood working skills in real world applications.
	C116.2	*Build* different parts with fitting in engineering applications.
	C116.3	*Develop* various basic prototypes in black smith & tiny smith applications.
	C116.4	*Apply* different types of basic electric circuit connections.
	C116.5	*Understand* the basic components, peripherals and basic operations of a computer.
C117 Environmental Science	**C117.1**	*Understand* about the environment and natural resources.
	C117.2	*Understands* about various attributes of different types of pollution and their impacts on the environment and control methods along with waste management practices.
	C117.3	*Illustrate* about the ecosystem and knows the importance of conservation of biodiversity.
	C117.4	*Relate* the current environmental impacts with the societal problems.
	C117.5	*Identify* the current population explosion and their impacts environment.