



**LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY [A]: HYDERABAD
COURSE OUTCOMES**

SEMESTER-II

2021-22

(COMMON TO CSM AI&ML , IT,ECE &MECH)

ENVIRONMENTAL SCIENCES

C21.1	Adopt environmental ethics to attain sustainable development
C21.2	Develop an attitude of concern for the environment
C21.3	Conservation of natural resources and biological diversity.
C21.4	Creating awareness of green technologies formation's security.
C21.5	Imparts awareness for environmental laws and regulations.
C21.6	Apply the principles of ecology and biodiversity for sustainable development.

ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE

C22.1	Recall the knowledge of Indian Philosophical Foundation.
C22.2	Recognize all religions and their philosophy.
C22.3	Analyze Indian Languages, Culture and Literature.
C22.4	Identify Indian Fine Artistic skills.
C22.5	Assess Indian Education System, Ethics, and Moral Values
C22.6	Discuss Science and Scientists of Medieval and Modern India.

MATHEMATICS-II

C23.1	Explain engineering problems through Mathematics knowledge
C23.2	Solve system of linear equations with the help of Matrices and solving eigen value problems.
C23.3	Discuss the methods for solving certain first order differential equations and insight into its applications.
C23.4	Determine solution of certain higher order differential equations and exposure into its applications.
C23.5	Analyse the basic problems of Gamma, Beta and Legendre's functions.
C23.6	Apply the concept of Laplace Transforms in improper integrals and to the ordinary differential equations.

ENGINEERING PHYSICS

C24.1	Apply various types of crystalline materials in advancement of technology.
C24.2	Analyze the energy levels in constant and periodic potentials to understand the basic properties of materials.
C24.3	Apply duality of matter to solve quantum mechanical problems and remember the basic laws of electricity and magnetism.
C24.4	Interpret the properties of magnetic materials and superconductors.
C24.5	Illustrate working of lasers and optical fibers in high-speed communication.
C24.6	Classify the materials and can justify its application in divergent fields.

PROGRAMMING FOR PROBLEM SOLVING

C25.1	Formulate simple algorithms and translate the algorithms to programs using c language.
C25.2	Implement conditional branching & iteration and arrays
C25.3	Apply the function concepts to implement searching and sorting algorithms.
C25.4	Analyze the usage of structures and pointer variable.
C25.5	Apply the concept of pointers for implementing programs on dynamic memory management and string handling.
C25.6	Design and implement programs to store data in structures and files.

ENGINEERING PHYSICS LAB

C26.1	Apply the basic knowledge of semiconductors and understand the I-V characteristics of p-n junction diode, solar cell and thermistors.
C26.2	Evaluate the carrier concentration of a semiconductor materials by applying Hall effect principle.
C26.3	Interpret the basics of electrical properties and apply to semiconductors.
C26.4	Understand the laws of mechanics from Torsional pendulum.
C26.5	Analyze the diffraction phenomenon in measuring the wavelength of laser.
C26.6	Apply the basic principles of light to determine numerical aperture of optical fiber.

PROGRAMMING FOR PROBLEM SOLVING LAB

C27.1	Choose appropriate data type for implementing programs in C language.
C27.2	Design and implement modular programs involving input output operations, decision making and looping constructs.
C27.3	Implement search and sort operations on arrays.
C27.4	To decompose a problem into functions and to develop modular reusable code
C27.5	Apply the concept of pointers for implementing programs on dynamic memory management and string handling.
C27.6	Design and implement programs to store data in structures and files.

ENGINEERING GRAPHICS & DESIGN PRACTICE

C28.1	Learn basics of Dimensioning, Detail Drawings and Engineering Design.
C28.2	Demonstrate the projection of point's lines, planes then create virtual drawing by using CAD software.
C28.3	Generating the solid projections & Section of the solids.
C28.4	Develop isometric drawing of simple objects Reading the orthographic Projections of these objects.

C28.5	Differentiate and visualize. 3D to 2D & 2D to 3D Vice- Versa.
C28.6	Use the knowledge of Engineering Graphics to draw floor drawing, Simple Machine Element, Basic Electrical Drawing, Basic Networking Drawing.

(COMMON TO CSE, CSD)

INDIAN CONSTITUTION	
C21.1	Recall the background of the present constitution of India
C21.2	Recognize the working of the Union, State and Local levels.
C21.3	Identify the fundamental rights and duties.
C21.4	Examine the Directive Principle of State Policy
C21.5	Illustrate the functioning and distribution of financial resources between the Centre and the states
C21.6	Discuss the role of Election Commission of India
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ENGINEERING CHEMISTRY	
C23.1	Apply concept of electrode potential in identifying feasibility of electrochemical reaction; illustrate electro analytical techniques and working of batteries.
C23.2	Compare and contrast the mechanism of corrosion of materials on the basis of electrochemical approach and devise corrosion control methods.
C23.3	Calculate the physical & chemical parameters of quality of water and explain the process of water treatment.
C23.4	Predict the influence of chemical structure on properties of materials and their choice in engineering applications.
C23.5	Determine the quality of fuel base on analytical methods and classify.

C23.6	Use the concept of green chemistry to modify engineering processes and materials.	
BASICELECTRICAL ENGINEERING		
C24.1	Get an exposure to common electrical components and their ratings	
C24.2	Comprehend the usage of common electrical measuring instruments	
C24.3	Analyze the Laws and theorems in DC circuits	
C24.4	Analyze the voltage and currents in RL, RC and RLC Circuits.	
C24.5	Test the basic characteristics of transformers and electrical machines.	
C24.6	Analyze the performance of DC Motors and DC Generators	
ENGLISH FOR PROFESSIONAL COMMUNICATION		
C25.1	Reading & Writing	Use communicative skills through Reading & Writing
C25.2	Understanding Prose & Poetry	Develop a habit of reading following various techniques
C25.3	Comprehension (Prose & Poetry)	Analyze the content critically, analytically and logically
C25.4	Vocabulary	Interpret vocabulary through various ways and use them appropriately.
C25.5	Grammar	Demonstrate grammatically correct sentences
C25.6	Writing	Illustrate various formats of letters, memo, essay, scripts, reports etc.
ENGINEERING CHEMISTRY LAB		
C26.1	Analyze the hardness and alkalinity of water.	
C26.2	Illustrate the mobility of ions in strong acids and weak acids using conductivity meter.	
C26.3	Compare the electrode potential of a given solutions.	
C26.4	Demonstrate the principles of Colorimetry and estimate the rate constant.	
C26.5	Test the amount of Ferrous ions.	
C26.6	Calculate the amount of synthesized drug.	
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EFFECTIVE COMMUNICATION SKILLS LAB	
C28.1	Interpret formal and informal spoken language
C28.2	Use acceptable pronunciation, stress and intonation.
C28.3	Develop confidence through formal conversation.
C28.4	Build an enthusiasm to participate in individual and group activities.
C28.5	Apply verbal and non-verbal communication skills in different situations.
C28.6	Demonstrate formal presentations and interviews confidently.
ENGINEERING AND IT WORKSHOP	
C29.1	Differentiate about the tools and Fabricate components with their own hands
C29.2	Examine the dimensional accuracies and dimensional tolerances possible with different manufacturing processes.
C29.3	Assemble the different components and will be able to produce small mechanisms/devices of their interest.
C29.4	Demonstrate practical skills of carpentry, tinsmith, fitting, house wiring.
C29.5	Differentiate Engineering Materials and Manufacturing Methods.
C29.6	Determine trades and techniques used in Workshop and chooses the best material/ manufacturing process for the application.

DEPARTMENT OF CIVIL ENGINEERING

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C23.6	Use the concept of green chemistry to modify engineering processes and materials.	
ENGINEERING MECHANICS		
C24.1	Apply the fundamental concepts of forces, equilibrium conditions for static loads.	
C24.2	Determine the centroid, Centre of gravity and moment of inertia for various sections.	
C24.3	Analyze forces in members of the truss by method of joints and sections.	
C24.4	Analyze the friction for single and connected bodies,	
C24.5	Apply the basic concepts of dynamics, their behavior, analysis and motion of bodies.	
C24.6	Solve problems by using work energy method and impulse momentum method for single and connected bodies.	
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ENGINEERING MECHANICS LAB	
C29.1	Describe positions, forces and moments in terms of vector forms in two and three dimensions.
C29.2	Draw the complete free body diagram and write the equilibrium equations to solve unknown quantities.
C29.3	Calculate the position of centroid and Centre of gravity for two- and three-dimensional figures.
C29.4	Evaluate the magnitude of moment of inertia of plane and 3d objects.
C29.5	Apply the concepts of lami's theorem to determine the magnitude of three forces in a coplanar system.
C29.6	Apply the principles of friction to find the coefficient of friction on a body when slides on an inclined plane surface.