

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



**EMESTER-I**

**2021-22**

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

**INDIAN CONSTITUTION**

C11.1	Recall the background of the present constitution of India
C11.2	Recognize the working of the Union, State and Local levels.
C11.3	Identify the fundamental rights and duties.
C11.4	Examine the Directive Principle of State Policy
C11.5	Illustrate the functioning and distribution of financial resources between the Centre and the states
C11.6	Discuss the role of Election Commission of India

**MATHEMATICS-I**

C12.1	Solve engineering problems with the help of Mathematics tool
C12.2	Test for the nature of Sequence and series
C12.3	Calculate the problems on single variable, curvature, evolutes and envelopes and different series
C12.4	Determine the limit, continuity, partial derivatives, Jacobian and maxima and minima of function of several variables
C12.5	Evaluate double and triple integration and learn its applications
C12.6	Explain and apply the concepts of Vector differentiation, gradient, curl and divergence and its integration

**ENGINEERING CHEMISTRY**

C13.1	Apply concept of electrode potential in identifying feasibility of electrochemical reaction; illustrate electro analytical techniques and working of batteries.
C13.2	Compare and contrast the mechanism of corrosion of materials on the basis of electrochemical approach and devise corrosion control methods.
C13.3	Calculate the physical & chemical parameters of quality of water and explain the process of water treatment.
C13.4	Predict the influence of chemical structure on properties of materials and their choice in engineering applications.
C13.5	Determine the quality of fuel base on analytical methods and classify.
C13.6	Use the concept of green chemistry to modify engineering processes and materials.

**BASIC ELECTRICAL ENGINEERING**

C14.1	Get an exposure to common electrical components and their ratings
C14.2	Comprehend the usage of common electrical measuring instruments
C14.3	Analyze the Laws and theorems in DC circuits
C14.4	Analyze the voltage and currents in RL, RC and RLC Circuits.
C14.5	Test the basic characteristics of transformers and electrical machines.
C14.6	Analyze the performance of DC Motors and DC Generators

### ENGLISH FOR PROFESSIONAL COMMUNICATION

C15.1	Reading & Writing	Use communicative skills through Reading & Writing
C15.2	Understanding Prose & Poetry	Develop a habit of reading following various techniques
C15.3	Comprehension (Prose & Poetry)	Analyze the content critically, analytically and logically
C15.4	Vocabulary	Interpret vocabulary through various ways and use them appropriately.
C15.5	Grammar	Demonstrate grammatically correct sentences
C15.6	Writing	Illustrate various formats of letters, memo, essay, scripts, reports etc.

### ENGINEERING CHEMISTRY LAB

C16.1	Analyze the hardness and alkalinity of water.
C16.2	Illustrate the mobility of ions in strong acids and weak acids using conductivity meter.
C16.3	Compare the electrode potential of a given solutions.
C16.4	Demonstrate the principles of Colorimetry and estimate the rate constant.
C16.5	Test the amount of Ferrous ions.
C16.6	Calculate the amount of synthesized drug.

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**EFFECTIVE COMMUNICATION SKILLS LAB**

C18.1	Interpret formal and informal spoken language
C18.2	Use acceptable pronunciation, stress and intonation.
C18.3	Develop confidence through formal conversation.
C18.4	Build an enthusiasm to participate in individual and group activities.
C18.5	Apply verbal and non-verbal communication skills in different situations.
C18.6	Demonstrate formal presentations and interviews confidently.

**ENGINEERING AND IT WORKSHOP**

C19.1	Differentiate about the tools and Fabricate components with their own hands
C19.2	Examine the dimensional accuracies and dimensional tolerances possible with different manufacturing processes.
C19.3	Assemble the different components and will be able to produce small mechanisms/devices of their interest.
C19.4	Demonstrate practical skills of carpentry, tinsmith, fitting, house wiring.
C19.5	Differentiate Engineering Materials and Manufacturing Methods.
C19.6	Determine trades and techniques used in Workshop and chooses the best material/ manufacturing process for the application.

(COMMON TO CSE, CSD)

**ENVIRONMENTAL SCIENCES**

C11.1	Adopt environmental ethics to attain sustainable development
C11.2	Develop an attitude of concern for the environment
C11.3	Conservation of natural resources and biological diversity.
C11.4	Creating awareness of green technologies formation's security.
C11.5	Imparts awareness for environmental laws and regulations.
C11.6	Apply the principles of ecology and biodiversity for sustainable development.

**ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE**

C12.1	Recall the knowledge of Indian Philosophical Foundation.
C12.2	Recognize all religions and their philosophy.
C12.3	Analyze Indian Languages, Culture and Literature.
C12.4	Identify Indian Fine Artistic skills.

C12.5	Assess Indian Education System, Ethics, and Moral Values
C12.6	Discuss Science and Scientists of Medieval and Modern India.
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<b>ENGINEERING PHYSICS</b>	
C14.1	Apply various types of crystalline materials in advancement of technology.
C14.2	Analyze the energy levels in constant and periodic potentials to understand the basic properties of materials.
C14.3	Apply duality of matter to solve quantum mechanical problems and remember the basic laws of electricity and magnetism.
C14.4	Interpret the properties of magnetic materials and superconductors.
C14.5	Illustrate working of lasers and optical fibers in high-speed communication.
C14.6	Classify the materials and can justify its application in divergent fields.
<b>PROGRAMMING FOR PROBLEM SOLVING</b>	
C15.1	Formulate simple algorithms and translate the algorithms to programs using c language.
C15.2	Implement conditional branching & iteration and arrays
C15.3	Apply the function concepts to implement searching and sorting algorithms.
C15.4	Analyze the usage of structures and pointer variable.
C15.5	Apply the concept of pointers for implementing programs on dynamic memory management and string handling.
C15.6	Design and implement programs to store data in structures and files.
<b>ENGINEERING PHYSICS LAB</b>	
C16.1	Apply the basic knowledge of semiconductors and understand the I-V characteristics of p-n junction diode, solar cell and thermistors.
C16.2	Evaluate the carrier concentration of a semiconductor materials by applying Hall effect principle.
C16.3	Interpret the basics of electrical properties and apply to semiconductors.
C16.4	Understand the laws of mechanics from Torsional pendulum.
C16.5	Analyze the diffraction phenomenon in measuring the wavelength of laser.

C16.6	Apply the basic principles of light to determine numerical aperture of optical fiber.
<b>PROGRAMMING FOR PROBLEM SOLVING LAB</b>	
C17.1	Choose appropriate data type for implementing programs in C language.
C17.2	Design and implement modular programs involving input output operations, decision making and looping constructs.
C17.3	Implement search and sort operations on arrays.
C17.4	To decompose a problem into functions and to develop modular reusable code
C17.5	Apply the concept of pointers for implementing programs on dynamic memory management and string handling.
C17.6	Design and implement programs to store data in structures and files.
<b>ENGINEERING GRAPHICS &amp; DESIGN PRACTICE</b>	
C18.1	Learn basics of Dimensioning, Detail Drawings and Engineering Design.
C18.2	Demonstrate the projection of point's lines, planes then create virtual drawing by using CAD software.
C18.3	Generating the solid projections& Section of the solids.
C18.4	Develop isometric drawing of simple objects Reading the orthographic Projections of these objects.
C18.5	Differentiate and visualize. 3D to 2D & 2D to 3D Vice- Versa.
C18.6	Use the knowledge of Engineering Graphics to draw floor drawing, Simple Machine Element, Basic Electrical Drawing, Basic Networking Drawing.

## DEPARTMENT OF CIVIL ENGINEERING

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C16.2	Solve the energy gap, carrier concentration of a semiconductor by applying Hall effect principle and dielectric constant.
C16.3	Demonstrate the basic principles of light absorption and emission to study the characteristics of Solar cell and LED.

<b>C16.4</b>	Interpret the laws electricity and magnetism from Stewart and Gees apparatus, laws of mechanics from Torsional pendulum
<b>C16.5</b>	Analyze the diffraction and magnetic phenomenon in measuring the wavelength of laser and hysteresis loss.
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