LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY: HYDERABAD

COURSE OUTCOMES
SEMESTER II
2020-21
(COMMON TO IT ,CSE AI&ML,ECE &MECH)

ENVIRONMENTAL SCIENCES		
C21.1	Apply environmental ethics to attain sustainable development	
C21.2	Demonstrate an attitude of concern for the environment	
C21.3	Discuss the methods of natural resources and biological diversity	
C21.4	Recognise the needs of green technologies formation's security	
C21.5	Illustrate awareness or environmental laws and regulations	
C21.6	Apply the principles of ecology and biodiversity for sustainable development	
ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE		
C22.01	To get a knowledge in Indian Philosophical Foundations.	
C22.02	To Know Indian Languages, Culture and Literature	
C22.03	To know Indian fine arts in India & Their Philosophy.	
C22.04	To make familiar with Indian Education system, Ethics and Morals	
C22.05	To explore the Science and Scientists of Medieval and Modern India	
ENGLISH		
C23.01	Communication	• Develop various skills to communicate through Listening, Speaking, Reading & Writing
C23.02	Lesson's Reading, Understanding & Comprehension	• Use the study & prescribed learning material. • Encourage to inculcate a habit of reading following various techniques, for general & specific details. • Able to comprehend the topic or content critically, analytically and logically. • Boost imagination of the situations and react appropriately.
C23.03	Vocabulary	• Enrich vocabulary through various ways of word formation. • Utility of one word substitute, homophones, homonyms, prefix and suffix. • Use of appropriate words in the context.
C23.04	Grammar	• Write grammatically correct sentences following syntax; structure concord, various forms of sentence structures, parts of speech, tenses, voice, articles& punctuations.
C23.05	Writing	• Utility of correct structures of sentence & paragraph • Learn and use various formats – letters, memo, essay, scripts, reports etc. • Utilization of 7Cs along with the five stages of the writing skills.
C23.06	Writing	• Comprehend and interpret logical & creative thinking in meaningful writings through Guided writing with verbal cues
MATHEMATICS II		
C24.01	Perceive engineering problems through Mathematics knowledge	
C24.02	Classify and Solve system of linear equations with the help of Matrices and solving eigen value problems.	
C24.03	Solve analytically certain first order differential equations and insight into its applications.	

C24.04	Determine solution of certain higher order differential equations and exposure into its applications.
C24.05	Make use of the knowledge of Gamma, Beta and Legendre's functions.
C24.06	Utilize the concept of Laplace Transforms in improper integrals and to the ordinary differential equations.
CHEMISTRY	
C25.01	Use the basic concept of electrochemistry and batteries and apply its principle in . batteries.
C25.02	Classify the physical and chemical parameters of quality of water and explain the process of water treatment.
C25.03	Explain the mechanism of corrosion of materials on the basis of electrochemical approach and its control methods.
C25.04	Determine the influence of chemical structure on properties of materials and their choice in engineering applications.
C25.05	Examine the properties and characteristics of different types of fuels and its composition and analyses the importance of calorific value and cracking.
C25.06	Analyse the importance of green chemistry to modify engineering materials and synthesis.
PROGRAMMING FOR PROBLEM SOLVING	
C26.01	Formulate simple algorithms for arithmetic and logical problems.
C26.02	Computing Environments, Translate the algorithms to flow charts and programs (in c language).
C26.03	Test and execute the programs and correct syntax and logical errors.
C26.04	Implement conditional branching, iteration and recursion.
C26.05	Decompose a problem into functions and synthesize a complete program using divide and conquer approach.
C26.06	Use arrays, pointers structures and files to formulate algorithms and programs.
ENGLISH LAB	
C27.01	Giving them sufficient practice in listening with comprehension
C27.02	Providing them ample opportunities to improve their public speaking skills
C27.03	Training them in the use of correct pronunciation, stress and intonation.
C27.04	Sensitizing them to use of verbal and no-verbal communication appropriate to the context
C27.05	Encouraging them to learn the art of conversation to suit formal and informal situation
C27.06	Preparing them to make presentations and face interviews
CHEMISTRY LAB	
C28.01	determine the hardness of water
C28.02	Illustrate of mobility of ions in strong acids and weak acids using conductivity meter
C28.03	Calculate the electrode potential of a given solution.
C28.04	Apply the principles of Colorimetry and Electrochemistry in quantitative estimations.
C28.05	Analyze of the rate constant of a reaction.
C28.06	Outline the synthesis of drug.
PROGRAMMING FOR PROBLEM SOLVING LAB	
C29.01	Choose appropriate data type for implementing programs in C language.

C29.02	Design and implement modular programs involving input output operations, decision making and looping constructs
C29.03	Implement search and sort operations on arrays.
C29.04	Apply the concept of pointers for implementing programs on dynamic memory management and string handling.
C29.05	Design and implement programs to store data in structures and files.
WORSHOP PRACTICE	
C210.01	Understand that human life and safety is given preference over all other things.
C210.02	Learn basic processes used in manufacturing sector.
C210.03	Understand the importance of design & of following due procedure to get efficient result, which is not only limited to academics but throughout life.
C210.04	Convert raw material into finished product.
C210.05	Describe conventional and modern manufacturing processes (which are taught through demonstration and video lectures).
C210.06	Determine trades and techniques used in Workshop and chooses the best material/ manufacturing process for the application.

ELECTRICAL AND ELECTRONICS ENGINEERING
Semester: II

Name of the Course: Indian constitution

Course.No	Outcomes
C21.01	know the background of the present constitution of India
C21.02	Understand the working of the union, state and local levels.
C21.03	Gain consciousness on the fundamental rights and duties.
C21.04	know about the Directive principles of Indian Constitution
C21.05	Be able to understand the functioning and distribution of financial resources between the centre and states
C21.06	Be exposed to the reality of hierarchical Indian social structure and the ways the grievancesof the deprived sections can be addressed to raise human dignity in a democratic way.

Name of the Course: Mathematics: 2

Course.No	Outcomes
C22.01	Ability to understand engineering problems through Mathematics knowledge

C22.02	To solve system of linear equations with the help of Matrices and solving eigen value problems.
C22.03	To get the command over solving certain first order differential equations and insight into its applications.
C22.04	To get the expertise over solving certain higher order differential equations and exposure into its applications.
C22.05	To solve the basic problems of Gamma, Beta and Legendre's functions.
C22.06	To get the concept of Laplace Transforms and its application to the ordinary differential equations.

Name of the Course:Physics

Course.No	Outcomes
C23.01	Apply various types of crystalline materials in advancement of technology.
C23.02	Analyze energy levels in constant and periodic potentials, duality of matter.
C23.03	Develop skills in designing the various electronic equipment.
C23.04	Distinguish the materials and can justify its application in divergent fields.
C23.05	Illustrates working of lasers and optical fibers in high speed communication.
C23.06	Understand and analyze the action of laser and principal of optical fibers.

Name of the Course: Basic Electrical Engineering

Course.No	Outcomes
C24.01	To analyze Electrical circuits to compute and measure the parameters of Electrical Energy.
C24.02	To comprehend the working principles of Electrical DC Machines.
C24..03	To Identify and test various Electrical switchgear, single phase transformers and assess the ratings needed in given application.
C24..04	To comprehend the working principles of electrical AC machines.

Name of the Course:Physics lab

Course.No	Outcomes
C25.01	Apply the basic knowledge of semiconductors and Understand the I-V characteristics of p-n junction diode, solar cell and thermistors.
C25.02	Evaluate the carrier concentration of semiconductor materials by applying Hall effect principle and dielectric constant of PZT material.
C25.03	Remember the basics of electrical properties and apply to semiconductors.
C25.04	Understand the laws of mechanics from Torsional pendulum
C25.05	Analyze the various parameters (Coercivity, Retentivity and Hysteresis) of ferromagnetic materials
C25.06	Apply the basic principles of lasers and optical fibers to determine wavelength and numerical aperture.

Name of the Course: Basic Electrical Engineering lab

Course.No	Outcomes
C26.01	Get an exposure to common electrical components and their ratings
C26.02	Comprehend the usage of common electrical measuring instruments
C26.03	Analyze the Laws and theorems in DC circuits
C26.04	Analyze the voltage and currents in RL, RC and RLC Circuits.
C26.05	Test the basic characteristics of transformers and electrical machines.
C26.06	Analyze the performance of DC Motors and DC Generators

Name of the Course:Engineering Graphics & Design

Course.No	Outcomes
C27.01	Learn basics of Dimensioning, Detail Drawings and Engineering Design.
C27.02	Demonstrate the projection of point's lines, planes then create virtual drawing by using CAD software.
C27.03	Construct the solid projection & Sectioning of the solids.
C27.04	Develop isometric drawing of simple objects Reading the orthographic Projections of these objects.
C27.05	Understanding and visualize. 3D to 2D & 2D to 3D Vice- Versa.
C27.06	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		
C21.01	To Know the background of the present constitution of India	
C21.02	Understanding the working of the Union, State and Local levels of governments	
C21.03	Analyze and Gaining consciousness of the fundamental rights and duties	
C21.04	Evaluating the functioning and distribution of financial, Administrative, and legislative relations between the centre and states	
C21.05	Creation and dissemination of information about the statutory institutions of India	
C21.01	To Know the background of the present constitution of India	
ENGLISH		
C22.01	Communication	Develop various skills to communicate through Listening, Speaking, Reading & Writing
C22.02	Lesson's Reading, Understanding	• Use the study & prescribed learning material. • Encourage to inculcate a habit of reading following various techniques, for general & specific details. • Able to comprehend the topic or content critically, analytically and logically.

	& Comprehension	Boost imagination of the situations and react appropriately.
C22.03	Vocabulary	• Enrich vocabulary through various ways of word formation. • Utility of one word substitute, homophones, homonyms, prefix and suffix. Use of appropriate words in the context.
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PHYSICS		
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C23.02	Analyze energy levels in constant and periodic potentials, duality of matter.	
C23.03	Develop skills in designing the various electronic equipment.	
C23.04	Distinguish the materials and can justify its application in divergent fields.	
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C23.06	Understand and analyze the action of laser and principal of optical fibers.	
MATHEMATICS –II		
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C24.05	Make use of the knowledge of Gamma, Beta and Legendre's functions.	
C24.06	Utilize the concept of Laplace Transforms in improper integrals and to the ordinary differential equations.	
BASIC ELECTRICAL ENGINEERING		
C25.01	Get an exposure to common electrical components and their ratings	
C25.02	Comprehend the usage of common electrical measuring instruments	
C25.03	Analyze the Laws and theorems in DC circuits	
C25.04	Analyze the voltage and currents in RL, RC and RLC Circuits.	

C25.05	Test the basic properties of transformers and electrical machines.
C25.06	Analyze the performance of DC Motors and DC Generators
ENGLISH LAB	
C26.02	Giving them sufficient practice in listening with comprehension
C26.03	Providing them ample opportunities to improve their public speaking skills
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C26.05	Sensitizing them to use of verbal and no-verbal communication appropriate to the context
C26.06	Encouraging them to learn the art of conversation to suit formal and informal situation
C26.02	Preparing them to make presentations and face interviews
PHYSICS LAB	
C27.01	Apply the basic knowledge of semiconductors and Understand the I-V characteristics of p-n junction diode, solar cell and thermistors.
C27.02	Evaluate the carrier concentration of semiconductor materials by applying Hall effect principle and dielectric constant of PZT material.
C27.03	Remember the basics of electrical properties and apply to semiconductors.
C27.04	Understand the laws of mechanics from Torsional pendulum
C27.05	Analyze the various parameters (Coercivity, Retentivity and Hysteresis) of ferromagnetic materials
C27.06	Apply the basic principles of lasers and optical fibers to determine wavelength and numerical aperture.
BASIC ELECTRICAL ENGINEERING LAB	
C28.01	Verification of Kirchoff's Laws, Thevenin's, Norton's and Superposition theorems.
C28.02	Study of Three Phase Supply and RL-RC circuits for single phase AC supply
C28.03	Loading of single phase and three phase transformers and observing the voltage-current relationship across primary and secondary windings
C28.04	Performance of Three phase Induction motors
C28.05	Performance of DC Machines (Motors and Generators)
ENGINEERING GRAPHICS & DESIGN	
C29.01	Learn basics of Dimensioning, Detail Drawings and Engineering Design.
C29.02	Exposure to Computer-Aided geometric design
C29.03	Demonstrate the projection of points, lines and planes then create virtual drawing by using CAD software
C29.04	Construct the solid projections & section of solids
C29.05	Development of surfaces, Development of isometric views of simple objects and reading the orthographic views of these objects

C29.06	Use the knowledge of Engineering Graphics to draw floor drawing, Simple Machine Element, Basic Electrical Drawing, Basic Networking Drawing.