LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY: HYDERABAD
COURSE OUTCOMES
SEMESTER I
2020-21
(COMMON TO IT, CSE AI&ML, ECE & MECH)

INDIAN CONSTITUTION	
C11.01	To Know the background of the present constitution of India
C11.02	Understanding the working of the Union, State and Local levels of governments
C11.03	Analyze and Gaining consciousness of the fundamental rights and duties
C11.04	Evaluating the functioning and distribution of financial, Administrative, and legislative relations between the Centre and states
C11.05	Creation and dissemination of information about the statutory institutions of India
C11.01	To Know the background of the present constitution of India
PHYSICS	
C12.01	Apply various types of crystalline materials in advancement of technology.
C12.02	Analyze energy levels in constant and periodic potentials, duality of matter.
C12.03	Develop skills in designing the various electronic equipment.
C12.04	Distinguish the materials and can justify its application in divergent fields.
C12.05	Illustrates working of lasers and optical fibers in high speed communication.
C12.06	Understand and analyze the action of laser and principal of optical fibers.
MATHEMATICS –I	
C13.01	Perceive engineering problems with the help of Mathematics knowledge.
C13.02	Examine the nature of Sequence and different series
C13.03	Apply the knowledge of single variable, curvature, evaluates and envelopes and different series in real problems
C13.04	Explain the limit, continuity, partial derivatives, Jacobi and and maxima and minima of function of several variables
C13.05	Evaluate double and triple integration and learn its applications
C13.06	Utilize and apply the concepts of Vector differentiation, gradient, curl and divergence and its integration
BASIC ELECTRICAL ENGINEERING	
C14.01	Get an exposure to common electrical components and their ratings
C14.02	Comprehend the usage of common electrical measuring instruments
C14.03	Analyze the Laws and theorems in DC circuits
C14.04	Analyze the voltage and currents in RL, RC and RLC Circuits.
C14.05	Test the basic properties of transformers and electrical machines.
C14.06	Analyze the performance of DC Motors and DC Generators
PHYSICS LAB	
C15.01	Apply the basic knowledge of semiconductors and Understand the I-V characteristics of p-n junction diode, solar cell and thermistors.
C15.02	Evaluate the carrier concentration of semiconductor materials by applying Hall effect principle and dielectric constant of PZT material.

C15.03	Remember the basics of electrical properties and apply to semiconductors.
C15.04	Understand the laws of mechanics from Torsional pendulum
C15.05	Analyze the various parameters (Coercivity, Retentivity and Hysteresis) of ferromagnetic materials
C15.06	Apply the basic principles of lasers and optical fibers to determine wavelength and numerical aperture.
BASIC ELECTRICAL ENGINEERING LAB	
C16.01	Verification of Kirchoff's Laws, Thevenin's, Norton's and Superposition theorems.
C16.02	Study of Three Phase Supply and RL-RC circuits for single phase AC supply
C16.03	Loading of single phase and three phase transformers and observing the voltage-current relationship across primary and secondary windings
C16.04	Performance of Three phase Induction motors
C16.05	Performance of DC Machines (Motors and Generators)
ENGINEERING GRAPHICS & DESIGN	
C17.01	Learn basics of Dimensioning, Detail Drawings and Engineering Design.
C17.02	Exposure to Computer-Aided geometric design
C17.03	Demonstrate the projection of points, lines and planes then create virtual drawing by using CAD software
C17.04	Construct the solid projections & section of solids
C17.05	Development of surfaces, Development of isometric views of simple objects and reading the orthographic views of these objects
C17.06	Use the knowledge of Engineering Graphics to draw floor drawing, Simple Machine Element, Basic Electrical Drawing, Basic Networking Drawing.

ELECTRICAL AND ELECTRONICS ENGINEERING

Name of the Course: Environmental Science

Course. No	Outcomes
C11.01	Illustrate various environmental challenges due to anthropogenic activities &awareness on social issues
C11.02	To make students understand the importance of natural resources and their conservation.
C11.03	To learn & able to understand ecosystem and importance of ecological balance for sustainable development.
C11.04	Solve the threats of bio-diversity
C11.05	Minimize the pollution by creating awareness in people
C11.06	Minimize environmental laws to combat the challenges

Name of the Course: Essence of Indian Traditional Knowledge

Course. No	Outcomes
C12.01	Gain knowledge of Indian Philosophical Foundation
C12.02	Understand Indian Languages, Culture and Literature
C12.03	Appreciate Indian Fine Artistic Skills and its intricacies
C12.04	Familiarize with Indian Education System, Ethics and Moral values
C12.05	Explore the Science and Scientists of Medieval and Modern India
C12.06	Comprehend different forms of contribution of Indian traditional system

Name of the Course:English

Course.No	Outcomes
C13.01	Develop various skills to communicate through Listening, Speaking ,Reading & Writing
C13.02	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.
C13.03	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.
C13.04	Write grammatically correct sentences following syntax; structure concord, various forms of sentence structures, parts of speech, tenses, voice, articles& punctuations.
C13.05	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.
C13.06	• Comprehend and interpret logical & creative thinking in meaningful writings through Guided writing with verbal cues

Name of the Course: Mathematics -I

Course. No	Outcomes
C14.01	Ability to understand engineering problems through Mathematics
C14.02	To learn the concepts of Sequence and series
C14.03	To get the knowledge of function of single variable, curvature, evolutes and envelopes and different series

C14.04	To get familiar with function of several variables, partial differentiation, concept and calculation of Maxima and Minima.
C14.05	To learn the concepts of integration, evaluation of double and triple integration and its applications
C14.06	To get the deep knowledge of Vector calculation, gradient, curl and divergence and integration concept over vectors.

Name of the Course: Chemistry all branches (except civil)

Course. No	**Outcomes**
C15.01	Use the basic concept of electrochemistry and batteries and apply its principle in . batteries.
C15.02	Classify the physical and chemical parameters of quality of water and explain the process of water treatment.
C15.03	Explain the mechanism of corrosion of materials on the basis of electrochemical approach and its control methods.
C15.04	Determine the influence of chemical structure on properties of materials and their choice in engineering applications.
C15.05	Examine the properties and characteristics of different types of fuels and its composition and analyses the importance of calorific value and cracking. (B
C15.06	Analyze the importance of green chemistry to modify engineering materials and synthesis
	Engineering chemistry (CIVIL)
C15.01	Classify the physical and chemical parameters of quality of water and explain the process of water treatment.
C15.02	Explain the mechanism of corrosion of materials on the basis of electrochemical approach and its control methods.
C15.03	Determine the influence of chemical structure on properties of materials and their choice in engineering applications.
C15.04	Illustrate chemical reaction during manufacture of types cement, glass and advanced ceramic.
C15.05	Examine the properties, characteristics and composition of different types adhesives.
C15.06	Demonstrate the precautions, properties and composition of different types propellants.

Name of the Course: Programming for problem solving

Course. No	**Outcomes**
C16.01	Formulate simple algorithms for arithmetic and logical problems.

C16.02	Computing Environments, Translate the algorithms to flow charts and programs (in c language).
C16.03	Test and execute the programs and correct syntax and logical errors.
C16.04	Implement conditional branching, iteration and recursion.
C16.05	Decompose a problem into functions and synthesize a complete program using divide and conquer approach.
C16.06	Use arrays, pointers structures and files to formulate algorithms and programs.

Name of the Course: English lab

Course. No	**Outcomes**
C17.01	Giving them sufficient practice in listening with comprehension
C17.02	Providing them ample opportunities to improve their public speaking skills
C17.03	Training them in the use of correct pronunciation, stress and intonation.
C17.04	Sensitizing them to use of verbal and no-verbal communication appropriate to the context
C17.05	Encouraging them to learn the art of conversation to suit formal and informal situation
C17.06	Preparing them to make presentations and face interviews

Name of the Course: Chemistry lab

Course.No	**Outcomes**
C18.01	determine the hardness of water
C18.02	Illustrate of mobility of ions in strong acids and weak acids using conductivity meter
C18.03	Calculate the electrode potential of a given solution.
C18.04	Apply the principles of Colorimetry and Electrochemistry in quantitative estimations.
C18.05	Analyze of the rate constant of a reaction.
C18.06	Outline the synthesis of drug.

Name of the Course: Programming for problem solving lab

Course.No	**Outcomes**
C19.01	Choose appropriate data type for implementing programs in C language.

C19.02	Design and implement modular programs involving input output operations, decision making and looping constructs
C19.03	Implement search and sort operations on arrays.
C19.04	Apply the concept of pointers for implementing programs on dynamic memory management and string handling.
C19.05	Design and implement programs to store data in structures and files.

Name of the Course: Workshop /Manufacturing process

Course. No	**Outcomes**
C110.01	Understand that human life and safety is given preference over all other things.
C110.02	Learn basic processes used in manufacturing sector.
C110.03	Understand the importance of design & of following due procedure to get efficient result, which is not only limited to academics but throughout life.
C110.04	Convert raw material into finished product.
C110.05	Compare & contrast conventional and modern manufacturing processes (which are taught through demonstration and video lectures).

(COMMON TO CSE ,CSD)

ENVIRONMENTAL SCIENCES	
C11.1	Apply environmental ethics to attain sustainable development
C11.2	Demonstrate an attitude of concern for the environment
C11.3	Discuss the methods of natural resources and biological diversity
C11.4	Recognise the needs of green technologies formation's security
C11.5	Illustrate awareness or environmental laws and regulations
C11.6	Apply the principles of ecology and biodiversity for sustainable development
ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE	
C12.01	To get a knowledge in Indian Philosophical Foundations.
C12.02	To Know Indian Languages, Culture and Literature
C12.03	To know Indian fine arts in India & Their Philosophy.
C12.04	To make familiar with Indian Education system, Ethics and Morals
C12.05	To explore the Science and Scientists of Medieval and Modern India

MATHEMATICS I	
C13.01	Perceive engineering problems with the help of Mathematics knowledge.
C13.02	Examine the nature of Sequence and different series
C13.03	Apply the knowledge of single variable, curvature, evolutes and envelopes and different series in real problems
C13.04	Explain the limit, continuity, partial derivatives, Jacobiand and maxima and minima of function of several variables
C13.05	Evaluate double and triple integration and learn its applications
C13.06	Utilize and apply the concepts of Vector differentiation, gradient, curl and divergence and its integration
CHEMISTRY	
C14.01	Use the basic concept of electrochemistry and batteries and apply its principle in . batteries.
C14.02	Classify the physical and chemical parameters of quality of water and explain the process of water treatment.(BTL4)
C14.03	Explain the mechanism of corrosion of materials on the basis of electrochemical approach and its control methods. (BTL2)
C14.04	Determine the influence of chemical structure on properties of materials and their choice in engineering applications. (BTL3)
C14.05	Examine the properties and characteristics of different types of fuels and its composition and analyses the importance of calorific value and cracking. (BTL3)
C14.06	Analyse the importance of green chemistry to modify engineering materials and synthesis.
PROGRAMMING FOR PROBLEM SOLVING	
C15.01	Formulate simple algorithms for arithmetic and logical problems.
C15.02	Computing Environments, Translate the algorithms to flow charts and programs (in c language).
C15.03	Test and execute the programs and correct syntax and logical errors.
C15.04	Implement conditional branching, iteration and recursion.
C15.05	Decompose a problem into functions and synthesize a complete program using divide and conquer approach.
C15.06	Use arrays, pointers structures and files to formulate algorithms and programs.
CHEMISTRY LAB	
C16.01	determine the hardness of water
C16.02	Illustrate of mobility of ions in strong acids and weak acids using conductivity meter
C16.03	Calculate the electrode potential of a given solution.
C16.04	Apply the principles of Colorimetry and Electrochemistry in quantitative estimations.
C16.05	Analyze of the rate constant of a reaction.
C16.6	Outline the synthesis of drug.
PROGRAMMING FOR PROBLEM SOLVING LAB	
C17.01	Choose appropriate data type for implementing programs in C language.
C17.02	Design and implement modular programs involving input output operations, decision making and looping constructs
C17.03	Implement search and sort operations on arrays.
C17.04	Apply the concept of pointers for implementing programs on dynamic memory management and string handling.

C17.05	Design and implement programs to store data in structures and files.
WORKSHOP /MANUFACTURING PROCESS	
C18.01	Understand that human life and safety is given preference over all other things.
C18.02	Learn basic processes used in manufacturing sector.
C18.03	Understand the importance of design & of following due procedure to get efficient result, which is not only limited to academics but throughout life.
C18.04	Convert raw material into finished product.
C18.05	Describe conventional and modern manufacturing processes (which are taught through demonstration and video lectures).
C18.06	Determine trades and techniques used in Workshop and chooses the best material/ manufacturing process for the application.