



LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY

Approved by AICTE/Affiliated to Osmania University/Estd.2002



Accredited 'A' grade by NAAC



Accredited by NBA

Sy.No:32, Himayathsagar, Golconda Post, Near TSPA Junction, Hyderabad-500 091

Ph: 6309012442/43, Fax: 040-6625 3642, Website: www.lords.ac.in, Email: principal@lords.ac.in

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING COURSE OUTCOMES (CO)

II-II SEMESTER

Course Name: Electrical Machines II (C134AG)

for academic year 2019-20 (II-II)

Items	Course Outcomes	Taxonomy
C2 26.1	The student will be familiar with the single-phase and three-phase transformers, the machines which are the part of our daily life.	understands
C2 26.2	The student is able to test the Transformer to find the efficiency and regulation.	Evaluate
C2 26.3	The student will learn the applications of Auto transformer which includes the starting of 3-phase induction motor.	Analyze
C2 26.4	The student understands the behavior and utilization of three-phase induction motor in the field of Industry.	understands
C2 26.5	The student is able to know the performance of the machine at different loads from circle diagram	understands
C2 26.6	The student can control the speed of the three-phase induction motor precisely in different ways	understands

Course Name: Control Systems (C134AX)

for academic year 2019-20 (II-II)

Items	Course Outcomes	Taxonomy
C3 14.1	The student will get a thorough knowledge on open loop and closed loop control systems and concept of feedback.	understands
C3 14.2	The student will get a thorough knowledge mathematical modelling and transfer function derivations of translational and rotational systems.	Evaluate
C3 14.3	The student will get a thorough knowledge transfer function through block diagram algebra and signal flow graphs.	understands
C3 14.4	The student will get a thorough knowledge time response and frequency response analysis of different ordered systems through characteristic equation and time domain specifications.	understands
C3 14.5	The student will get a thorough knowledge stability analysis in time domain and frequency domain.	understands
C3 14.6	The student can able to apply the above conceptual things to real world Electrical and Electronics problems and applications.	understands

Course Name: Digital Electronics (C134BX)

for academic year 2019-20 (II-II)

Items	Course Outcomes	Taxonomy
C2 24.1	The student will be able to manipulate numeric information in different forms. Example, different bases. signed integers, various codes such as ASCII, Gray & ABCD	Evaluate
C2 24.2	The student will able to manipulate simple Boolean expressions using theorems & postulates of Boolean algebra & to minimize combinational function	Evaluate
C2 24.3	The student will be able to design & analyze small combinational circuits & to use standard combinational function building blocks to build larger more complex circuits.	understands
C2 24.4	The student will be able to design & analyze small sequential circuits, combinational circuits, and logical circuits.	understands
C2 24.5	The student will be able to analyze devices & to use standard sequential functions. Building blocks to build larger more complex circuits.	understands
C2 24.6	The student gains knowledge on the concepts of sequential circuits, analyze & implement synchronous state machine using flip-flops	understands

Course Name: Laplace Transforms, Numerical Methods & Complex Variables (C134CF) for academic year 2019-20 (II-II)

Items	Course Outcomes	Taxonomy
C2 11.1	The student will learn methodology that are based on some standard for forming equation using Cauchy's and Lagrange's for easier calculation	Evaluate
C2 11.2	The student will able to find the series solution using Legendries polynomial equations and Bessel differential equations and solve easily	Analyze
C2 11.3	The student will get familiar with evaluation of integrals using Cauchy's integral , Mc Laurens series and Laurent series expansion of complex function	Analyze
C2 11.4	The student will able to analyze the complex function with reference to their analytic integration using Cauchy's integral theorem , Taylor's series, Maclaurin's series and Laurent's series expansions of complex functions.	Analyze
C2 11.5	The student will able to evaluation integrals using residue theorem, transform a given function from z - plane to w – plane.	Analyze
C2 11.6	The student will able to identify the transformations like translation, magnification, rotation and reflection and inversion, bilinear transformations.	Understand

Course Name: Digital Electronics Lab (C13409) for academic year 2019-20 (II-II)

Items	Course Outcomes	Taxonomy
C13409.1	Design and test various basic linear application circuits using Op amps	Analyze
C13409.2	Design and test various signal comparison operation circuits using Op amps and Comparators	Analyze
C13409.3	Design and test various waveform generation circuits using Op amps, Comparators and IC packages	Analyze
C13409.4	Design and test various Op amp based Active Filter Circuits	Analyze
C13409.5	Design and test PLL application circuits including FM Demodulation	Analyze
C13409.6	Design and test various combinational logic circuits and systems	Analyze

Course Name: Electrical Machines II Lab. (C13417) for academic year 2019-20 (II-II)

Items	Course Outcomes	Taxonomy
C3 17.1	The student gets knowledge on O.C. and S.C. tests on single phase transformer.	Analyze
C3 17.2	The student gets knowledge on three phase induction motor by conducting no load and blocked rotor tests.	Analyze
C3 17.3	The student gets a knowledge on V and \wedge curves of three phase synchronous motors.	Analyze
C3 17.4	The student will be able to determine X_d and X_q of a salient pole synchronous machine.	Analyze
C3 17.5	The student gets knowledge on a Scott connection of transformers.	Analyze
C3 17.6	The student will be able to develop equivalent circuit of a single phase induction motor.	Analyze

Course Name: Control Systems Lab. (C13415) for academic year 2019-20 (II-II)

Items	Course Outcomes	Taxonomy
C3 29.1	The student gets practical knowledge on the time response of second order system and characteristics of synchro's.	Analyze
C3 29.2	The student gets practical knowledge on effect of feedback on DC servo motor	Understand
C3 29.3	The student gets practical knowledge on transfer function of DC Generator and DC motor	Evaluate
C3 29.4	The student gets practical knowledge on Effect of P, PD, PI, PID Controller on a second order systems and lag and lead compensation	Analyze
C3 29.5	The student gets practical knowledge on characteristics of magnetic amplifiers and AC servomotor	Understand

Course Name: Power Electronics (C136DJ) for academic year 2019-20 (III-II)

Items	Course Outcomes	Taxonomy
C136DJ.1	To study semiconductor power devices for various uses according to its characteristics.	Analyze
C136DJ.2	Describe the AC-DC, DC-AC and DC-DC Converters for single and three phase controlled rectifiers.	Understand
C136DJ.3	Describe the use of PWM to control voltage regulation.	Understand
C136DJ.4	Student will able to design a system with the power Electronic devices with required application.	Analyze
C136DJ.5	Concept of dual converter	Understand
C136DJ.6	Concept of cyclo-converter	Understand

Course Name: Switch Gear and Protection (C136EA) for academic year 2019-20 (III-II)

Items	Course Outcomes	Taxonomy
C136EA.1	Students able to analyze Elementary principle of CB's and ARC interruptions	Understand
C136EA.2	Detailed study about Types of CB's	Understand
C136EA.3	Student able to describe about electromagnetic and static relay	Understand
C136EA.4	Can able to express concepts of Neutral grounding and protection against over voltages.	Understand
C136EA.5	To study the Protection of the generators and transformers	Understand
C136EA.6	To study the concept of over voltages	Understand

Course Name: Power System Analysis (C136DK) for academic year 2019-20 (III-II)

Items	Course Outcomes	Taxonomy
C136DK.1	Demonstrate an understanding of the nature of the modern power system, including the behavior of the constituent components and sub-systems	Understand
C136DK.2	Analyze a network under both balanced and unbalanced fault conditions and interpret the results	Analyze
C136DK.3	Demonstrate an awareness of the methods used for voltage regulation in electrical power networks	Understand
C136DK.4	Demonstrate an understanding of the factors which determine transient stability in both single machine and multi-machine systems	Understand
C136DK.5	Describe the role of insulation co-ordination in the design and operation of power networks, including the role of circuit breakers	Understand
C136DK.6	Demonstrate the ability to conduct experiments in the Electrical Engineering Laboratory in accordance with Health and Safety Regulations and to record, interpret and report on the experimental results	Understand

Course Name: Linear Digital & Integrated Circuit Analysis (C136CH) for academic year 2019-20 (III-II)

Items	Course Outcomes	Taxonomy
C136CH.1	Understand the basic building blocks of linear integrated circuits and its characteristics	Understand
C136CH.2	Student are able to understand the logic families and specialized applications of operational amplifier	Understand
C136CH.3	To analyze and design active filters	Analyze
C136CH.4	Understand the waveform generators and oscillators	Understand
C136CH.5	Understand the applications of 555 timer	Understand
C136CH.6	Understand the theory of ADC&DAC	Understand

Course Name: Entrepreneurship and Small Business Enterprises (C136EZ) for academic year 2019-20 (III-II)

Items	Course Outcomes	Taxonomy
C136EZ.1	Analyze the business environment in order to identify business opportunities,	Analyze
C136EZ.2	Identify the elements of success of entrepreneurial ventures	Understand
C136EZ.3	Consider the legal and financial conditions for starting a business venture	Evaluate
C136EZ.4	Specify the basic performance indicators of entrepreneurial activity	Analyze
C136EZ.5	Explain the importance of marketing and management in small businesses venture	Understand
C136EZ.6	Interpret their own business plan.	Analyze

Course Name: Advanced English Communication English Lab (C13601) for academic year 2019-20 (III-II)

Items	Course Outcomes	Taxonomy
C13601.1	Improve the students' fluency in English, through a well-developed vocabulary	Understand
C13601.2	Enable them to listen to English spoken at normal conversational speed by educated English speakers and respond appropriately	Understand
C13601.3	Can communicate their ideas relevantly and coherently in writing.	Understand
C13601.4	To analyze different socio-cultural and professional contexts.	Understand

Course Name: Power Systems Lab (C13625) for academic year 2019-20 (III-II)

Items	Course Outcomes	Taxonomy
C13625.1	Analyze experimental results and effective documentation	Analyze
C13625.2	Exhibit professional behavior	Understand
C13625.3	Analyze the performance of transmission lines and relays	Analyze
C13625.4	Calculate the steady-state power flow in a power system.	Evaluate
C13625.5	Analyze different types of short-circuit faults which occur in power systems	Analyze

Analyze

Course Name: Power Electronics Lab (C13624) for academic year 2019-20 (III-II)

Items	Course Outcomes	Taxonomy
C13624.1	Students have the capability to get the power electronic converters and their applications.	Understand
C13624.2	They are able to do certain projects like simulation of control of electrical apparatus.	Understand
C13624.3	Ability to design controlling of AC and DC power using converters with basics.	Understand
C13624.4	Analyze the Applications on AC and DC power using converters.	Understand
C13624.5	Frequency control by using cyclo converter	Understand
C13624.6	PWM control techniques	Understand

Course Name: Fundamentals of HVDC & FACTS Devices. (C128BR) for academic year 2019-20 (IV-II)

Items	Course Outcomes	Taxonomy
C128BR.1	Students get thorough knowledge on basics of HVDC system	Understand
C128BR.2	Students able to understand the concept of converter control schemes	Understand
C128BR.3	Able to understand the concept of reactive power control and power flow analysis	Understand
C128BR.4	Students get thorough knowledge on basics concept of FACTS	Understand
C128BR.5	Able to understand the necessity of compensator and their operation	Understand
C128BR.6	Students get thorough knowledge on static series compensator and combined compensator	Understand

Course Name: Renewable Energy Sources (C128ED) for academic year 2019-20 (IV-II)

Items	Course Outcomes	Taxonomy
C128ED.1	Students get thorough knowledge on various types of renewable energy sources	Understand
C128ED.2	Students able to understand the concepts solar energy collection ,storage & application	Understand
C128ED.3	Students get thorough knowledge on principals of wind energy, Biomass	Understand
C128ED.4	They able to understand the concept of geothermal energy	Understand
C128ED.5	Students can able to understand the theory of OTEC	Understand
C128ED.6	They can get thorough knowledge on direct energy conversion	Understand

Course Name: EHVAC Transmission (C128BH) for academic year 2019-20 (IV-II)

Items	Course Outcomes	Taxonomy
C128BH.1	Students get thorough knowledge on general aspects and necessity of extra high voltage transmission	Understand
C128BH.2	Students able to understand the concepts of voltage gradient	Understand
C128BH.3	Students get thorough knowledge on effects of corona	Understand
C128BH.4	They able to understand the electro static field	Understand
C128BH.5	Students can understand the theory of travelling waves	Understand
C128BH.6	They can get thorough knowledge on voltage control of EHVAC transmission	Understand

Course Name: Seminar (C4 29) for academic year 2019-20 (IV-II)

Items	Course Outcomes	Taxonomy
C4 29.1	The student will be engaged in the integral activities of reading, discussion and composition around a particular topic.	Understand
C4 29.2	The student will develop presentation skills.	Evaluate
C4 29.3	The student will gain confidence to face the interviews.	Understand
C4 29.4	The student will be able to investigate the advancements in the particular topic.	Analyze
C4 29.5	The student will be able to distinguish opinions from researched calims.	Understand
C4 29.6	The student will be able to prepare appropriate and participate effectively in the presentation.	Evaluate

Course Name: Project Work (C4 2A) for academic year 2019-20 (IV-II)

Items	Course Outcomes	Taxonomy
C4 2A.1	The student gains knowledge on the basic concepts of electrical engineering and learn the implementation.	Understand
C4 2A.2	The student understands the design and analysis of particular problems in project.	Analyze
C4 2A.3	The students learn MATLAB programming and implementing the Simulink.	Analyze
C4 2A.4	The student will be able to develop the hardware.	Understand
C4 2A.5	The student will learn the complete process of a project – designing, programming, module development.	Evaluate
C4 2A.6	The student will gain practical knowledge.	Understand

Course Name: Comprehensive Viva-Voce (C4 2B) for academic year 2019-20 (IV-II)

Items	Course Outcomes	Taxonomy
C4 2B.1	The student will be able to face interview both at the academic and the industrial sector.	Understand
C4 2B.2	The student will be able to exhibit the strength and grip on the fundamentals of the subjects studied in the previous semesters.	Understand
C4 2B.3	The student will be able to comprehend all the courses studied in the entire program	Understand
C4 2B.4	The student will be able to enhance their communication skills and instructiveness.	Understand
C4 2B.5	The student will be able to access themselves in the complete course.	Understand
C4 2B.6	The student will revise all the course right from fundamentals.	Understand