RISE KRISHNA SAI PRAKASAM GROUP OF INSTITUTIONS::ONGOLE

(Approved by AICTE-NEW DELHI, Affiliated to JNTUK KAKINADA)

NH-16, Valluru,-523272, Ongole, Prakasam District, A.P

DEPARTMENT OF EEE

COURSE OUTCOMES

A Y:2018-19

I Year I Semester

CO No.	Subject: English-I	Taxonomy Level
After completing the course the student shall be able to		
C111.1	Students enhanced communication skills and team work	Applying
C111.2	students can understand the structure of a paragraph	Understanding
C111.3	students will improve self motivation and self esteem	Creating
C111.4	students can apply problem solving adaptability and stress management in their lives	Applying
C111.5	students will learn personal presentation	Analyzing
C111.6	students will develop conversation proficiency	Applying

CO No.	Subject: Mathematics-I	Taxonomy Level
After completing the course the student shall be able to		
C112.1	Find the solutions of first order ordinary differential equations.	Understanding
C112.2	Apply the technique of solving ordinary differential equations in some engineering problems like electrical circuits, simple harmonic motions etc.	Applying
C112.3	Define Laplace transform and inverse Laplace transform of various functions and solve ordinary differential equations using Laplace transform.	Applying
C112.4	Utilize the technique of partial differentiation to find the extreme values of functions of several variables.	Applying
C112.5	Find the solutions of linear and nonlinear partial differential equations of first order.	Understanding
C112.6	Solve the higher order linear partial differential equations.	Understanding

CO No.	Subject: Applied Chemistry	Taxonomy Level
After completing the course the student shall be able to		
C113.1	Differentiate the plastics and rubber materials and their uses	Analysing
C113.2	Explain the origin of fuel and their economic advantages and limitations	Understanding
C113.3	Explain the working of batteries and its applications	Understanding
C113.4	Describe the synthesis of nano materials and green methods	Understanding
C113.5	Classify the types of solids and magnetic materials	Understanding
C113.6	Discuss the non conventional energy resources and fuel cells	Understanding

CO No.	Subject: Engineering Mechanics	Taxonomy Level
After completing the course the student shall be able to		
C114.1	Recall the concept of force system, friction and its applications	Remembering
C114.2	Construct the free body diagrams for different problems and solve the problems using the equilibrium conditions.	Applying
C114.3	Identify the centroid and centre of gravity for different composite sections	Applying
C114.4	Solve the problems on moment of inertia, mass moment of inertia for different composite sections using parallel axis and perpendicular theorems.	Applying
C114.5	Summarize the motion of a body in general plane motion which includes rectilinear and curvilinear paths	Understanding
C114.6	Recall the concept of work, power, and energy and calculate these values work-energy and impulse momentum principles.	Remembering

CO No.	Subject: Computer Programming	Taxonomy Level
After completing the course the student shall be able to		
C115.1	Explain the basic terminology used in computer programming	Understanding
C115.2	Discuss the design of Algorithms, writing and executing programs	Understanding
C115.3	Explain the different data types, selection and Basic loop structures	Understanding
C115.4	Apply the modular programming and recursive solution formulations.	Applying
C115.5	Demonstrate the data representations using arrays.	Applying
C115.6	Implement data structures, dynamic memory, create, update data files.	Applying

CO No.	Subject: Environmental Studies	Taxonomy Level
After completing the course the student shall be able to		
C116.1	Explain the concepts of the ecosystem and its functions in the environment.	Understanding
C116.2	Summarize the natural resources and their importance for the sustenance of life & need to conserve the natural	Understanding

	resources	
C116.3	Demonstrate the values, threats, conservation practices to protect the biodiversity.	Applying
C116.4	Describe various attributes of the pollution and their impacts and measures to reduce pollution along with waste management practices.	Understanding
C116.5	Evaluate social issues both rural and urban environment and the possible means to combat the challenges, with help of environmental legislations of India	Evaluation
C116.6	Implement Environmental Impact Assessment, Green campus, business, & politics in their daily life	Applying

CO No.	Subject: Engineering Chemistry Laboratory	Taxonomy Level
After completing the course the student shall be able to		
C117.1	Describe the experimental skills to design new experiments in engineering.	Understanding
C 117.2	Dxplain tge different types of titrations and acquire skills in instrumentation.	Understanding
C 117.3	Determine hardness of various water samples.	Evaluating
C 117.4	Determine tge no of free ions and charges in a mixture of acids using conductivity meter.	Evaluating
C 117.5	Calculate the potential between reference electrode and un known solution by using potentio meter.	Understanding
CO No.	Subject: English-Communications Skills Lab-I	Taxonomy Level
After completing the course the student shall be able to		
C118.1	Explain the basic concepts of language useful for pupils in their career.	Applying
C118.2	Illustrate the usage of tenses in everyday life.	Understanding
C118.3	Apply the techniques of science through language ability in a practical way.	Applying
C118.4	Make use of grammatical sentences for perfect communication.	Creating
C118.5	Analyze the importance of future tense with examples .	Analyzing
C118.6	Find the speaking and writing skills through reading ability of safety measures.	Applying

CO No.	Subject: Computer Programming Lab	Taxonomy Level
After completing the course the student shall be able to		
C119.1	Explain the basic terminology of C programming development environment.	Understanding
C119.2	Discuss the design of Algorithms, writing, compiling, debugging and executing Programs.	Understanding
C119.3	Analyzing the complexity of problems and modular programming.	Analyzing
C119.4	Understand and apply the in-built and user defined functions for solving problems.	Applying
C119.5	Understand and apply the pointers and memory allocations techniques for solving Problems.	Applying
C119.6	Implement different data structures, and create, update data files	Applying

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DEPARTMENT OF EEE
COURSE OUTCOMES

A Y:2018-2019

I Year II Semester

CO No.	Subject: English-II	Taxonomy Level
After completing the course the student shall be able to		
C121.1	Acquire the knowledge of education and how to serve the society accordingly.	Remembering
C121.2	Classify the different perspective of science in the sense of a common man and scientist.	Understanding
C121.3	Apply the knowledge to adjust ourselves towards the environmental conditions in the society.	Applying
C121.4	Create an awareness on the present day and traditional beliefs.	Applying
C121.5	Create the awareness on health threats due to climate changes.	Applying
C121.6	Identify the greatness and the hard work of the pioneers and try to inspire in attainting language communication skills	Remembering

CO No.	Subject: Mathematics-II (Mathematical Methods)	Taxonomy Level
After completing the course the student shall be able to		
C121.1	Understand the most basic numerical method to solve simultaneous linear equations.	Understanding
C122.2	Define interpolation and compute interpolating polynomial from the given data using interpolating formula.	Remembering
C122.3	Solve differential equations numerically using numerical methods.	Applying
C122.4	Understand the basic concepts of complex function and analytic functions using C-R equations.	Remembering
C122.5	Make use of Cauchy's theorem and Cauchy's Integral theorem to evaluate complex integration.	Applying
C122.6	Make use of residues to evaluate complex integration.	Applying

CO No.	Subject: Mathematics-III	Taxonomy Level
After completing the course the student shall be able to		
C123.1	Applying analytical and numerical techniques to solve linear system of equations using matrices.	Applying

C123.2	Find the Eigen values and Eigen vectors of the square matrices and discuss the nature of quadratic forms.	Remembering
C123.3	Applying the techniques of multiple integrals to find the areas and volumes.	Applying
C123.4	Find the values of definite integrals using Beta and Gamma functions.	Remembering
C123.5	Find the gradient of scalar point functions, divergence and curl of vector point functions.	Remembering
C123.6	Applying Green's, Stokes and Gauss's divergence theorems to find line, surface and volume integrals.	Applying

CO No.	Subject: Applied Physics	Taxonomy Level
After completing the course the student shall be able to		
C124.1	Explain the properties of light supporting the wave nature and working of optical instruments	Understanding
C124.2	Apply Lasers in scientific research and engineering by developing knowledge on basic principle in the working of Lasers & optical fibers.	Applying
C124.3	Describe the concept of Electrical or Electronic gadgets and their performance under E- or H- fields.	Understanding
C124.4	Explain the concept of Acoustics of Buildings, and the behavior of materials in the external magnetic and electric fields and physical significance of Maxwell's equations.	Understanding
C124.5	Explain the concept of matter waves, free electron theory and origin of energy band formation in solids .	Understanding
C124.6	Explain the intrinsic and extrinsic semiconductors ,drift ,diffusion currents in semiconductors.	Understanding

CO No.	Subject: Electrical Circuit Analysis-I	Taxonomy Level
After completing the course the student shall be able to		
C125.1	Analyze basic concepts of electrical circuits of active and passive circuits	Analyzing
C125.2	Solve Circuits using Tree, Node, Branch, Cut set, Tie Set Methods.	Applying
C125.3	Find out Co-efficient of coupling for magnetic circuits	Applying
C125.4	Estimate of power factor for lagging and leading networks	Evaluating
C125.5	Draw the locus diagrams for series and parallel RL & RC networks	Applying
C125.6	Apply theorems for electrical circuits both DC & AC networks.	Remembering

CO No.	Subject: Engineering Drawing	Taxonomy Level
After completing the course the student shall be able to		
C126.1	Learn the usage of drawing instruments and how to draw Polygons, Engineering Curves and Scales	Remembering
C126.2	Explain about the Orthographic Projections, Projection of Points And Lines	Understanding
C126.3	Solve and draw the projections of straight lines inclined to both the planes	Applying
C126.4	Solve and draw the projection of planes	Applying
C126.5.	Solve and draw the projection of solids	Applying
C126.6	Draw the Isometric Views to Orthographic Views and vice versa	Applying

CO No.	Subject: English Communication Skills Lab-II	Taxonomy Level
After completing the course the student shall be able to		
C127.1	Explain the importance of body language	Understanding
C 127.2	Summarize the skill of general English through dialogue	Understanding
C 127.3	Develop short presentations on simple topics	Applying
C 127.4	Summarize training offered to students through Group Discussion	Analyzing
C 127.5	Describe the stand of interview skills through that students will successes	Remembering
C 127.6	Explain the knowledge ability to communicate the needs and requirements of Debate	Understanding

CO No.	Subject: Applied Physics Lab	Taxonomy Level
After completing the course the student shall be able to		
C128.1	Explain the appropriate application of Optics in Newton rings	Understanding
C128.2	Explain the appropriate application of Optics in Diffraction Grating	Understanding
C128.3	Apply the basic concepts of laser and techniques for the optics experiments.	Applying
C128.4	Apply the mathematical concepts/equations to obtain quantitative results.	Applying
C128.5	Explain the basic concepts of semiconductor physics, which are useful to understand the operation of Zener diode and PN junction diode	Understanding
C128.6	Develop basic communication skills through working in groups in performing the laboratory experiments and by interpreting	Evaluating

CO No.	Subject: Engineering Workshop & IT Workshop	Taxonomy Level
After completing the course the student shall be able to		

C129.1	Identify the different tools and prepare prototypes in the trades of Carpentry and Tinsmithy such as Cross half lap joint, Dove tail joint, rectangular Tray and Open scoop	Applying
C129.2	Identify the different tools and prepare prototypes in the trades of Fitting and Black smithy	Applying
C129.3	Apply the various House Wiring techniques such as connecting one lamp with one switch, connecting one lamp with two switches, connecting a fluorescent tube	Applying
C129.4	Apply the knowledge for computer assembling, software installation and trouble shoot and up gradation of system	Applying
C129.5	Learn MS-office package, internet tools and Apply the tools for preparation of PPT, Documentation and spread sheet etc	Applying

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Department of Electrical and Electronics Engineering

COURSE OUTCOME SUMMARY

AY: 2018-19   SEM: I   YEAR: II

CO No.	Course Name: ECA-II	Taxonomy level
After completion of this course the student will be able to		
C211.1	Explain the concepts Balanced three phase circuit.	Remembering
C211.2	Explain the concepts three phase unbalanced circuit.	Understanding
C211.3	find out transient response of electrical networks with different types of excitations	Applying
C211.4	Estimate the different types of two port network parameters.	Applying
C211.5	Synthesize the different networks	Creating
C211.6	Extract different harmonics components from the response of a electrical network.	Analyzing
CO. No	Course Name: EM-I	Taxonomy level
C212.1	Explain the principles of electromechanical energy conversion.	Understanding
C212.2	Describe the performance of DC machines.	Understanding
C212.3	Distinguish speed control methods.	Analyzing
C212.4	Analyze the performance of single phase transformers.	Analyzing
C212.5	Illustrate the methods of testing of single-phase transformer.	Applying
C212.6	Identify the three phase transformers connections.	Understanding
CO No.	Course Name: BED	Taxonomy level
C213.1	Describe the basic concepts of semiconductor physics, which are useful to understand the operation of diodes and Transistors.	Understanding
C213.2	Analyze the operation & V-I characteristics of diodes	Analyzing
C213.3	Design operation and design aspects of rectifiers and regulators	Designing
C213.4	Analyze biasing methods, Stabilization and Compensation techniques of Transistors.	Analyzing
C213.5	Explain the operation and characteristics of FET, Thyristors, Power IGBTs and Power MOSFETs	Understanding
C213.6	Explain the merits and demerits of positive and negative feedback and the role of feedback in oscillators and amplifiers	Understanding
CO. No	Course Name: EMF	Taxonomy level

CO. No		Taxonomy level
C214.1	Develop the electric field and potentials using Gauss's law or solving Laplace's and Poisson's equation	Applying
C214.2	Solve the capacitance, energy stored in dielectrics and get the concept of conduction and convection currents	Applying
C214.3	find magnetic field intensity due to current , the application of Ampere's law and the Maxwell's second and third equations	Remembering
C214.4	Explain magnetic forces and torque produced by currents in magnetic fields	Understanding
C214.5	Calculate self and mutual inductances and energy stored in the magnetic field	Applying
C214.6	Apply the knowledge on time varying fields and get ability to calculate induced emf. Concepts of displacement current and poynting vector and associated problems are solved.	Applying
CO. No	Course Name: T&HPM	Taxonomy level
C215.1	Distinguish various types of internal combustion engines and calculate the performance of different types of internal combustion engines.	Applying
C215.2	Understand steam formation and the standard steam data tables and	Understanding
C215.3	Understand the methods to improve the efficiency of gas turbines	Applying
C215.4	Understand fluid jets and various types of pumps, working and performance	Analyzing
C215.5	Discuss about various types of hydraulic turbines and calculate the performance of hydraulic turbines	Analyzing
C215.6	To train the areas of types of hydro electric power plants, estimation and calculation of different loads by considering various factors.	Evaluating
CO. No	Course Name: MEFA	Taxonomy level
C216.1	Relate Economic Principles with Business Practices for getting successful outcomes	Remembering
C216.2	Make use of Cost analysis to find Break Even Point (BEP) of an enterprise in order to avoid losses	Applying
C216.3	Compare the Price – out determinations under different competitions in the Markets and Pricing strategies	Understanding
C216.4	Interpret different forms of business organizations and the new economic environment in the real business	Understanding
C216.5	Make use of the financial statements and relevant ratios for evaluating company's financial performance to make optimal decisions	Applying
C216.6	Illustrate different Capital Budgeting Methods to estimate the best investment decision in business practices	Understanding
CO. No	Course Name: TH&PM LAB	Taxonomy level
C217.1	Understand various engine systems along with their function and necessity.	Understanding

C217.2	Conduct constant speed and variable speed tests on IC engines and interpret their performance.	Applying
C217.3	Test the performance of impact of Jets.	Applying
C217.4	Calibrate flow discharge measuring device used in pipes channels and tanks.	Applying
C217.5	Test the performance of pumps and turbines.	Applying
CO.No	**Course Name: EC LAB**	**Taxonomy level**
C218.1	Verify the various theorems for the given network.	Analyzing
C218.2	Determine the Z, Y, ABCD, Hybrid parameters for the network.	Applying
C218.3	Determine the resonance frequency, quality factor and bandwidth for RLC series and parallel network	Applying
C218.4	Determine the self, mutual inductance and coupling co-efficient of given circuit.	Applying
C218.5	Draw the locus diagrams for given circuits	Understanding
C218.6	Measure the three phase power for unbalanced loads	Understanding

Coordinator

RISE KRISHNA SAI PRAKASAM GROUP OF INSTITUTIONS::ONGOLE

Department of Electrical and Electronics Engineering

COURSE OUTCOMESUMMARY

AY: 2018-19   SEM: II   YEAR: II

CO No.	Course Name: EM	Taxonomy Level
After completion of this course the student will be able to		
C221.1	Match right type of instrument for measurement of voltage and current for ac and dc.	Remembering
C221.2	Select right type of instrument for measurement of power and energy able to calibrate energy meter by suitable method	Remembering
C221.3	Analyze ammeter and potentiometer	Analyzing
C221.4	select suitable bridge for measurement of electrical parameters	Remembering
C221.5	use the ballistic galvanometer and flux meter for magnetic measuring instruments	Understanding
C221.6	Measure frequency and phase difference between signals using CRO. Able to use digital instruments in electrical measurements.	Understanding
CO. No	Course Name: EM-II	Taxonomy Level
C222.1	Explain about the constructional details and principle of operation of Three Phase Induction Motor	Understanding
C222.2	Analyze about speed torque characteristics and find the speed control methods of Three Phase Induction Motor	Analyzing
C222.3	Explain about the constructional details and principle of operation of Single Phase Induction Motor	Understanding
C222.4	Design winding factors and predetermine the regulation of Synchronous Generator	Evaluating
C222.5	Predetermine the load sharing on Synchronous Generator	Evaluating
C222.6	Avoid hunting phenomenon, implementation methods of starting and correction of power factor with Synchronous Motor	Applying
CO No.	Course Name: STLD	Taxonomy Level
C223.1	Illustrate numbering systems.	Understanding
C223.2	Apply Boolean theorems and postulates in minimization of switching functions	Applying
C223.3	Design combinational circuits.	Creating
C223.4	Compare realization of Boolean functions using PROM, PAL, PLA.	Understanding
C223.5	Classify various sequential circuits.	Understanding
C223.6	Analyze sequential circuits.	Analyzing
CO. No	Course Name: CS	Taxonomy Level

C2 24.1	Derive the transfer functions of a physical system.	Applying
C2 24.2	calculate time domain specifications of the LTI systems	Applying
C2 24.3	Analyze stability of LTI systems by plotting root locus	Analyzing
C2 24.4	Draw bode and Nyquist plots for stability analysis of LTI systems	Analyzing
C2 24.5	Design compensators to improve system performance.	Evaluating
C2 24.6	Model the physical systems in state space.	Applying
CO.No	**Course Name: PS-1**	**Taxonomy Level**
C2 25.1	Explain the construction and operation of thermal power station	Understanding
C2 25.2	Identify different components in nuclear power station	Understanding
C2 25.3	Distinguish between AC and DC distribution system and estimate voltage drops	Applying
C2 25.4	Illustrate different components of air and gas insulated substations	Applying
C2 25.5	Identify single core and multi core cables with different insulating	Analyzing
C2 25.6	Analyze different economic factors of power generation and tariff	Applying
CO.No	**Course Name: MS**	**Taxonomy Level**
C2 26.1	Apply management science in decision making process& its importance, evaluation of management thought, how organisation structure is designed and its principle and types.	Applying
C2 26.2	List the types of management about work study, how quality is controlled, control charts and inventory control and their types.	Remembering
C2 26.3	Explain the main functional areas of organisation i.e., Financial Management, Production Management, Marketing Management, Human resource Management, Product life cycles and Channels of Distribution.	Understanding
C2 26.4	Illustrate the Development of Network And Identifying Critical Path.	Understanding
C2 26.5	Explain the concept of strategic management, environmental scanning, swot analysis and steps in strategy formulation and implementation.	Understanding
C2 26.6	Illustrate basic concepts of MIS, MRP,JIT,TQM, Six sigma, CMM, S ply chain management, ERP , BPO , about performance management, nch marking and balance score	Understanding
CO. No	**Course Name: EM-I LAB**	**Taxonomy Level**
C227.1	Determine the performance of DC machines and transformers.	Apply
C227.2	Examine the speed of DC motor.	Apply
C227.3	Describe three phase to two phase transformation and parallel connection of transformers	Apply
CO. No	**Course Name: EDC LAB**	**Taxonomy Level**
C228.1	Identify different active and passive electronic components used in the lab.	Applying

C228.2	Observe the characteristics of PN and Zener diode.	Analyzing
C228.3	Analyze the characteristics of Half wave and Full wave Rectifiers with and without filters	Analyzing
C228.4	Observe the characteristics of BJT, FET, UJT and SCR.	Analyzing
C228.5	Measure the Lissajous figures using CRO.	Evaluating
C228.6	Measure the frequency response characteristics of BJT and FET Amplifiers.	Evaluating

Coordinator

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Department of Electrical and Electronics Engineering

COURSE OUTCOMESUMMARY

AY: 2018-19   SEM: I   YEAR: III

CO. No	Course Name: PS-II	Taxonomy level
After completion of this course the student will be able to		
C311.1	Calculate the parameters of various types of transmission lines during different operating conditions.	Apply
C311.2	Explain the performance of short and medium transmission lines.	Understand
C311.3	Explain the performance of long transmission lines.	Understand
C311.4	Differentiate travelling waves on transmission lines at different conditions	Understand
C311.5	Describe various factors related to charged transmission lines.	Understand
C311.6	Calculate sag/tension of transmission lines and performance of line insulators.	Apply
CO. No	Course Name: RES	Taxonomy level
C312.1	Identify energy resources across the world and India.	Understanding
C312.2	Analyze the performance of flat plate collector, introducing solar air heaters and solar pond.	Analyzing
C312.3	Design solar Photo Voltaic systems	Applying
C312.4	Compare types of wind turbines, wind generators.	Understanding
C312.5	Explain the working principle of hydro and tidal power systems.	Understanding
C312.6	Differentiate biomass, fuel and geo-thermal energy resources.	Understanding
CO. No	Course Name: S&S	Taxonomy level
C313.1	Classify the signals and systems and principles of vector spaces, Concept of orthogonality.	Understanding
C313.2	Analyze the continuous-time signals and continuous-time systems using Fourier series and Fourier transform.	Analyzing
C313.3	Apply sampling theorem to convert continuous-time signals to discrete-time signal and reconstruct back.	Applying
C313.4	Explain the relationships among the various representations of LTI systems and concepts of convolution, correlation, Energy and Power density spectrum and their relationships.	Understanding
C313.5	Apply Laplace-transform to analyze continuous-time signals and systems.	Analyzing
C313.6	Apply z-transform to analyze discrete-time signals and systems.	Analyzing
CO. No	Course Name: PDC	Taxonomy level
C314.1	Design linear wave shaping circuits.	Designing

C314.2	Design non-linear wave shaping circuits.	Designing
C314.3	Apply the fundamental concepts of wave shaping for various switching, Analysis of Bistable Multivibrator.	Applying
C314.4	Analysis of Mono stable multi vibrator and Astable Multivibrator.	Analyzing
C314.5	Analysis of different Time base Generators	Analyzing
C314.6	Understand the concept of Logic gates & Sampling gates	Understanding
CO. No	**Course Name: PE**	**Taxonomy level**
C315.1	Explain the characteristics of various power semi conductor devices	Understanding
C315.2	Design firing circuits for scr	creating
C315.3	Explain the operation of single phase full wave converters	Understanding
C315.4	Explain the operation of three phase full wave converters	Understanding
C315.5	Analyze the operation ofsingle phase cyclo converters	Analyzing
C315.6	Explain the working of inverters	Understanding
CO. No	**Course Name: IPRP**	**Taxonomy level**
C319.1	Outline different types of Intellectual Properties (IPs), the right of ownership, scope of protection as well as the ways to create and to extract value from IP.	Understanding
C319.2	Recognize the crucial role of IP in organizations of different industrial sectors for the Purposes of product and technology development.	Remembering
C319.3	Identify activities and constitute IP infringements and the remedies available to the IP owner.	Understanding
C319.4	Describe the precautious steps to be taken to prevent infringement of proprietary rights.	Understanding
C319.5	Understand importance of IP in products and technology development.	Understanding
C319.6	Discuss with the processes of Intellectual Property Management (IPM) and various approaches for IPM	Creating
CO. No	**Course Name: EM-II LAB**	**Taxonomy level**
C316.1	Determine the efficiency and regulation of transformer's and their performance	Applying
C316.2	Determine the regulation of three phase alternator by various methods and X_d/X_q ratio of alternator and the performance of the synchronous motor	Applying
C316.3	Apply various tests on the induction motor to know its performance	Applying
CO. No	**Course Name: CS LAB**	**Taxonomy level**
C317.1	Analyze The Performance And Working Magnetic Amplifier, D.C. Servo Motors, A.C. Servo Motors And Synchronous Motors.	Analyzing
C317.2	Design P,PI,PD And PID Controllers And Control The Temperature Using PID Controller	Creating
C317.3	Design Lag, Lead And Lag–Lead Compensators	Creating
C317.4	Determine The Transfer Function Of D.C Motor And Control The Position Of D.C Servo Motor Performance	Evaluating

CO. No	Course Name: EM LAB	Taxonomy level
C318.1	Calculate the electrical parameters voltage, current, power, energy and electrical characteristics of resistance, inductance and capacitance.	Applying
C318.2	Testing of transformer oil for its effectiveness.	Analyzing
C318.3	Calculate the parameters of inductive coil.	Applying
C318.4	Measure the power using C.T's	Analyzing

Coordinator

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Department of Electrical and Electronics Engineering

COURSE OUTCOMESUMMARY

AY: 2018-19   SEM: II   YEAR: III

CO. No	Course Name: PEC&D	Taxonomy level
C321.1	Explain the fundamentals of electric drive and different electric braking methods.	Understanding
C321.2	Analyze the operation of three phase converter fed dc motors and four quadrant operations of dc motors using dual converters.	Analyzing
C321.3	Classify the converter control of dc motors in various— quadrants of operation.	Understanding
C321.4	Know the concept of speed control of induction motor by using AC voltage controllers and voltage source inverters.	Understanding
C321.5	Compare the stator side control and rotor side control of three phase induction motor.	Understanding
C321.6	Explain the speed control mechanism of synchronous motors.	Understanding
CO. No	**Course Name: PSA**	**Taxonomy level**
C322.1	Draw an impedance diagram and construct Y_{BUS} matrix for a power system network.	Understanding
C322.2	Find out the load flow solution of a power system network using different load flow methods.	Analyzing
C322.3	Compute Z_{BUS} for a power system network.	Applying
C322.4	Derive and find out the fault current for different types of faults.	Analyzing
C322.5	Find out the sequence components of currents for any unbalanced power system network and draw the sequence network diagrams.	Analyzing
C322.6	Analyze the steady state, transient and dynamic stability concepts of a power system.	Analyzing
CO. No	**Course Name: MP&MC**	**Taxonomy level**
C323.1	Analyze the organization and architecture of 8086 Micro Processor	Analyzing
C323.2	Analyze the addressing modes to access memory	Analyzing
C323.3	Apply the interfacing concepts of 8086 microprocessor with IO as well as other devices	Analyzing
C323.4	Analyze the features and programming tools of 805	Understanding

	microcontrollers.	
C323.5	Discuss the features of PIC microcontrollers	Understanding
C323.6	Implement programs for PIC microcontroller based systems for real time applications using high-level language C.	Understanding
CO. No	**Course Name: DS**	**Taxonomy level**
C324.1	Demonstrate array adt and its operations	Applying
C324.2	Discuss about stack adt, queue adt and its operations	Understanding
C324.3	Perform different operations for storage and retrieval of data on linked lists	Applying
C324.4	Demonstrate binary search tree, heap tree, threaded binary tree and binary tree	Applying
C324.5	Design different types of graphs and the algorithm based on the graphs	Applying
C324.6	Explain concepts of sorting techniques	Understanding
CO. No	**Course Name: NN&FL**	**Taxonomy level**
C325.1	Identify different models of artificial neuron	Understanding
C325.2	Illustrate learning methods of ANN.	Understanding
C325.3	Select suitable algorithm of ANN for the given application	Applying
C325.4	Classify between classical and fuzzy sets	Understanding
C325.5	Explain Fuzzy logic controller.	Understanding
C325.6	Discuss the applications of Neural Networks and fuzzy logic	Applying
CO. No	**Course Name: PE LAB**	**Taxonomy level**
C326.1	Determine the characteristics of various power electronic devices and analyze gate drive circuits of IGBT.	Analyzing
C326.2	Analyze the performance of single–phase and three–phase full–wave bridge converters with both resistive and inductive loads.	Analyzing
C326.3	Analyze the performance of single phase AC voltage regulators with different loads and working principles of single phase and three phase converters	Analyzing
C326.4	Explain the working of inverters and application of PWM techniques for voltage control and harmonic mitigation	Understanding
CO. No	**Course Name: MP&MC LAB**	**Taxonomy level**
C327.1	Write and Simulate arithmetic, logical operations using TASM	Analyzing
C327.2	Write and Simulate string operations using TASM	Analyzing
C327.3	write an ALP to generate interrupt using 8259 PIC and display a message using 8279	Analyzing
C327.4	write an ALP to generate a waveform using PPI and also to communicate between two processors	Analyzing
C327.5	Write and simulate to make serial communication, reading & writing , timers using 8051 MC	Analyzing
C327.6	Verify interfacing modules like optoisolator, DC motor using C language with PIC 18	Analyzing
CO. No	**Course Name: DS LAB**	Taxonomy level

C328.1	Implement and test the functionally data structures like stacks, queues, and linked list	Analyzing
C328.2	Implement and test the functionally of searching and sorting techniques	Analyzing
C328.3	Implement and test the functionally of trees and graph traversal techniques	Analyzing
C328.4	Improve individual or team work skills, communication and report writing skills	Understanding

Coordinator

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Department of Electrical and Electronics Engineering

COURSE OUTCOMESUMMARY

AY: 2018-19   SEM: I   YEAR: IV

CO. No	Course Name: RES&S	Taxonomy level
C411.1	Identify energy resources across the world and India.	Understanding
C411.2	Analyze the performance of flat plate collector, introducing solar air heaters and solar pond.	Analyzing
C411.3	Design solar Photo Voltaic systems	Analyzing
C411.4	Compare types of wind turbines, wind generators.	Understanding
C411.5	Explain the working principle of hydro and tidal power systems.	Applying
C411.6	Differentiate biomass, fuel and geo-thermal energy resources.	Analyzing
CO. No	**Course Name: HVAC& DC**	**Taxonomy level**
C412.1	Explain the mechanical considerations of HV transmission system.	Understanding
C412.2	Illustrate the corona effects on transmission lines	Understanding
C412.3	Compare DC & AC transmission systems	Understanding
C412.4	Analyze the characteristics HVDC converters	Analyzing
C412.5	Describe reactive power control in HVDC	Analyzing
C412.6	Design of filters for harmonic elimination in transmission line.	Analyzing
CO. No	**Course Name: PSOC**	**Taxonomy level**
C413.1	Select optimal scheduling for generators.	Applying
C413.2	Understand and demonstrate hydrothermal scheduling.	Understanding
C413.3	Solve unit commitment problem.	Applying
C413.4	Understand load frequency control problem.	Applying
C413.5	Demonstrate various PID controllers in single area and two area systems.	Understanding
C413.6	Apply reactive power control techniques or line power compensation.	Applying
CO. No	**Course Name: INS**	**Taxonomy level**
C414.1	Classify the various types of signals and modulation techniques	Understanding
C414.2	Acquire proper knowledge to use various types of transducers.	Remembering
C414.3	classify and measure various parameters such as strain velocity, temperature, pressure etc.	Understanding
C414.4	Develop proper knowledge and working principles of various types of digital voltmeters.	Applying
C414.5	Measure various parameters like magnitude, phase and	Understanding

	frequency of a signal with the help of a CRO.	
C414.6	Acquire proper knowledge and able to handle various types of signal analyzers.	Remembering
CO. No	**Course Name: EDS**	**Taxonomy level**
C415.1	Explain the various factors of distribution system.	Understanding
C415.2	Explain the substation and feeders.	Understanding
C415.3	Determine the voltage drop and power loss of distribution systems	Applying
C415.4	Describe the protection and its coordination of distribution system	Understanding
C415.5	Discuss the effect of compensation , power factor improvement in distribution systems	Understanding
C415.6	Discuss the effect of voltage, current in distribution system	Understanding
CO. No	**Course Name: MP&MC LAB**	**Taxonomy level**
C416.1	Demonstrate the architecture of 8/16 bit microprocessors and micro controller.	Understanding
C416.2	Write assembly language programs based on arithmetic and logical operations using 8086 microprocessor and 8051 microcontrollers.	Understanding
C416.3	Interface 8086 MP& 8051MC with peripheral devices to connect with external world for real time applications.	Applying
CO. No	**Course Name: ES LAB**	**Taxonomy level**
C417.1	Simulate integrator circuit, differentiator circuit, Boost converter, Buck converter, full convertor and PWM inverter, transmission line by incorporating line, load and transformer models.	Remembering
C417.2	Perform transient analysis of RLC circuit by PSPICE.	Analyzing
C417.3	Find load flow solution for a transmission network with Newton– Rampson method, by using MATLAB.	Analyzing
CO. No	**Course Name: PS LAB**	**Taxonomy level**
C418.1	Determine the sequence impedance of Alternator and Transformer.	Analyzing
C418.2	Determine the transmission line parameters.	Applying
C418.3	Estimate the dielectric breakdown voltage of transformer oil.	Analyzing
C418.4	Study the operation and calibrate tong tester	Remembering
C418.5	Design and simulation of load frequency controllers, stability analysis and load flow studies of power system network	Analyzing

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