

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Consolidated Course outcome for all subjects –Regulation(2021)

Semester No :	01		
Course Title:	PROFESSIONAL ENGLISH -I	Course Code:	HS3152
Course Outcome No.	Course Outcome Statement		
CO-1	To use appropriate words in a professional context.		
CO-2	To gain understanding of basic Grammatic structures and use them in right context.		
CO-3	To read and infer the denotative and connotative meanings of technical texts.		
CO-4	To write definitions, descriptions, narrations and essays on various topics.		
CO-5	To develop learners' ability to read and write complex texts, summaries, articles, blogs, definitions, essays and user manuals.		
Course Title	MATRICES AND CALCULUS	Course Code:	MA3151
Course Outcome No	Course Outcome Statement		
CO-1	Use the matrix algebra methods for solving practical problems.		
CO-2	Apply differential calculus tools in solving various application problems.		
CO-3	Able to use differential calculus ideas on several variable functions.		
CO-4	Apply different methods of integration in solving practical problems.		
CO-5	Apply multiple integral ideas in solving areas, volumes and other practical problems.		
Course Title	ENGINEERING PHYSICS	Course Code:	PH3151
Course Outcome No	Course Outcome Statement		
CO-1	Understand the importance of mechanics.		
CO-2	Express their knowledge in electromagnetic waves.		
CO-3	Demonstrate a strong foundational knowledge in oscillations, optics and lasers.		
CO-4	Understand the importance of quantum physics.		
CO-5	Comprehend and apply quantum mechanical principles towards the formation of energy bands.		
Course Title	ENGINEERING CHEMISTRY	Course Code:	CY3151
Course Outcome No	Course Outcome Statement		
CO-1	To infer the quality of water from quality parameter data and propose suitable treatment methodologies to treat water.		
CO-2	To identify and apply basic concepts of nanoscience and nanotechnology in designing the synthesis of nanomaterials for engineering and technology applications.		
CO-3	To apply the knowledge of phase rule and composites for material selection requirements.		
CO-4	To recommend suitable fuels for engineering processes and applications.		
CO-5	To recognize different forms of energy resources and apply them for suitable applications in energy sectors.		

Course Title	PROBLEM SOLVING AND PYTHON PROGRAMMING	Course Code:	GE3151
Course Outcome No	Course Outcome Statement		
CO-1	Develop algorithmic solutions to simple computational problems.		
CO-2	Develop and execute simple Python programs.		
CO-3	Write simple Python programs using conditionals and loops for solving problems		
CO-4	Decompose a Python program into functions.		
CO-5	Represent compound data using Python lists, tuples, dictionaries etc.		
Course Title	PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY	Course Code:	GE3171
Course Outcome No	Course Outcome Statement		
CO-1	Develop algorithmic solutions to simple computational problems		
CO-2	Develop and execute simple Python programs.		
CO-3	Implement programs in Python using conditionals and loops for solving problems.		
CO-4	Deploy functions to decompose a Python program.		
CO-5	Process compound data using Python data structures.		
Course Title	PHYSICS AND CHEMISTRY LABORATORY	Course Code:	BS3171
Course Outcome No	Course Outcome Statement		
CO-1	To understand the functioning of various kinds of physics laboratory equipment.		
CO-2	To Use graphical models to analyze laboratory data.		
CO-3	To Use mathematical models as a medium for quantitative reasoning and describing physical reality.		
CO-4	To Access, process and analyze scientific information.		
CO-5	Solve problems individually and collaboratively.		
Semester No :	02		
Course Title	PROFESSIONAL ENGLISH - II	Course Code:	HS3252
Course Outcome No	Course Outcome Statement		
CO-1	To compare and contrast products and ideas in technical texts.		
CO-2	To identify and report cause and effects in events, industrial processes through technical texts		
CO-3	To analyze problems in order to arrive at feasible solutions and communicate them in the written format.		
CO-4	To present their ideas and opinions in a planned and logical manner.		
CO-5	To draft effective resumes in the context of job search.		

Course Title	STATISTICS AND NUMERICAL METHODS	Course Code:	MA3251
Course Outcome No	Course Outcome Statement		
CO-1	Apply the concept of testing of hypothesis for small and large samples in real life problems.		
CO-2	Apply the basic concepts of classifications of design of experiments in the field of agriculture.		
CO-3	Appreciate the numerical techniques of interpolation in various intervals and apply the numerical techniques of differentiation and integration for engineering problems.		
CO-4	Understand the knowledge of various techniques and methods for solving first and second order ordinary differential equations.		
CO-5	Solve the partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.		
Course Title	PHYSICS FOR ELECTRICAL ENGINEERING	Course Code:	PH3202
Course Outcome No	Course Outcome Statement		
CO-1	To know basics of dielectric materials and insulation.		
CO-2	To gain knowledge on the electrical and magnetic properties of materials and their applications.		
CO-3	To understand clearly of semiconductor physics and functioning of semiconductor devices.		
CO-4	To understand the optical properties of materials and working principles of various optical devices.		
CO-5	To appreciate the importance of nanotechnology and nanodevices.		
Course Title	BASIC CIVIL AND MECHANICAL ENGINEERING	Course Code:	BE3255
Course Outcome No	Course Outcome Statement		
CO-1	Understanding profession of Civil and Mechanical engineering.		
CO-2	Summarise the planning of building, infrastructure and working of Machineries.		
CO-3	Apply the knowledge gained in respective discipline		
CO-4	Illustrate the ideas of Civil and Mechanical Engineering applications.		
CO-5	Appraise the material, Structures, machines and energy.		
Course Title	ENGINEERING GRAPHICS	Course Code:	GE3251
Course Outcome No	Course Outcome Statement		
CO-1	Use BIS conventions and specifications for engineering drawing.		
CO-2	Construct the conic curves, involutes and cycloid.		
CO-3	Solve practical problems involving projection of lines.		
CO-4	Draw the orthographic, isometric and perspective projections of simple solids.		
CO-5	Draw the development of simple solids.		

Course Title	ELECTRIC CIRCUIT ANALYSIS	Course Code:	EE3251
Course Outcome No	Course Outcome Statement		
CO-1	Explain circuit's behavior using circuit laws.		
CO-2	Apply mesh analysis/ nodal analysis / network theorems to determine behavior of the given DC and AC circuit.		
CO-3	Compute the transient response of first order and second order systems to step and sinusoidal input.		
CO-4	Compute power, line/ phase voltage and currents of the given three phase circuit.		
CO-5	Explain the frequency response of series and parallel RLC circuits.		
Course Title	ENGINEERING PRACTICES LABORATORY	Course Code:	GE3271
Course Outcome No	Course Outcome Statement		
CO-1	Drawing pipe line plan; laying and connecting various pipe fittings used in common house hold plumbing work; Sawing; planning; making joints in wood materials used in common House hold wood work.		
CO-2	Wiring various electrical joints in common house hold electrical wire work		
CO-3	Welding various joints in steel plates using arc welding work; Machining various simple processes like turning, drilling, tapping in parts; Assembling simple mechanical assembly of Common house hold equipments; Making a tray out of metal sheet using sheet metal work.		
CO-4	Soldering and testing simple electronic circuits; Assembling and testing simple electronic components on PCB.		
Course Title	ELECTRIC CIRCUITS LABORATORY	Course Code:	EE3271
Course Outcome No	Course Outcome Statement		
CO-1	Use simulation and experimental methods to verify the fundamental electrical laws for the given DC/AC circuit.		
CO-2	Use simulation and experimental methods to verify the various electrical theorems.		
CO-3	Analyze transient behavior of the given RL/RC/RLC circuit using simulation and experimental methods.		
CO-4	Analyze frequency response of the given series and parallel RLC circuit using simulation and experimentation methods .		
CO-5	Analyze the performance of the given three-phase circuit using simulation and experimental methods.		

Semester No :	03		
Course Title	PROBABILITY AND COMPLEX FUNCTIONS	Course Code:	MA3303
Course Outcome No	Course Outcome Statement		
CO-1	Understand the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real life phenomenon.		
CO-2	Understand the basic concepts of one and two dimensional random variables and apply in engineering applications.		
CO-3	To develop an understanding of the standard techniques of complex variable theory in particular analytic function and its mapping property		
CO-4	To familiarize the students with complex integration techniques and contour integration techniques which can be used in real integrals.		
CO-5	To acquaint the students with Differential Equations which are significantly used in engineering problems.		
Course Title	ELECTROMAGNETIC FIELDS	Course Code:	EE3301
Course Outcome No	Course Outcome Statement		
CO-1	Visualize and explain Gradient, Divergence, and Curl operations on electromagnetic vector fields and identify the electromagnetic sources and their effects.		
CO-2	Compute and analyse electrostatic fields, electric potential, energy density along with their applications.		
CO-3	Compute and analyse magneto static fields, magnetic flux density, vector potential along with their applications.		
CO-4	Explain different methods of emf generation and Maxwell's equations		
CO-5	Explain the concept of electromagnetic waves and characterizing parameters		
Course Title	DIGITAL LOGIC CIRCUITS	Course Code:	EE3302
Course Outcome No	Course Outcome Statement		
CO-1	To describe different number systems and the characteristics of various digital logic families.		
CO-2	To Design and develop efficient combinational logic systems using minimization techniques.		
CO-3	To implementation of combinational circuits using Gates `and MSI Devices		
CO-4	To analyze and implement synchronous sequential circuits using flip-flops, counters, and shift registers.		
CO-5	To utilize VHDL to simulate and test RTL designs, as well as combinational and sequential circuits.		
Course Title	ELECTRON DEVICES AND CIRCUITS	Course Code:	EC3301
Course Outcome No	Course Outcome Statement		
CO-1	Explain the structure and operation of PN junction devices.		
CO-2	Design clipper, clamper, half wave and full wave rectifier, regulator circuits using PN junction diodes.		
CO-3	Analyze the structure and characteristics BJT, FET, MOSFET, UJT, Thyristor and IGBT.		
CO-4	Analyze the performance of various configurations of BJT and MOSFET based amplifier.		
CO-5	Explain the characteristics of MOS based cascade and differential amplifier.		

Course Title	ELECTRICAL MACHINES – I	Course Code:	EE3303
Course Outcome No	Course Outcome Statement		
CO-1	Apply the laws governing the electromechanical energy conversion for single and multiple excited systems.		
CO-2	Explain the construction and working principle of DC machines.		
CO-3	Interpret various characteristics of DC machines.		
CO-4	Compute various performance parameters of the machine, by conducting suitable tests.		
CO-5	Draw the equivalent circuit of transformer and predetermine the efficiency and regulation.		
Course Title	C PROGRAMMING AND DATA STRUCTURES	Course Code:	CS3353
Course Outcome No	Course Outcome Statement		
CO-1	Develop C programs for any real world/technical application.		
CO-2	Apply advanced features of C in solving problems.		
CO-3	Write functions to implement linear and non-linear data structure operations.		
CO-4	Suggest and use appropriate linear/non-linear data structure operations for solving a given problem.		
CO-5	Appropriately use sort and search algorithms for a given application.		
Course Title	ELECTRONIC DEVICES AND CIRCUITS LABORATORY	Course Code:	EC3311
Course Outcome No	Course Outcome Statement		
CO-1	Analyze the characteristics of PN, Zener diode and BJT in CE,CC,CB configurations experimentally		
CO-2	Analyze the characteristics of JFET and UJT experimentally		
CO-3	Analyze frequency response characteristics of a Common Emitter amplifier experimentally		
CO-4	Analyze the characteristics of RC phase shift and LC oscillators experimentally		
CO-5	Analyze the characteristics of half-wave and full-wave rectifier with and without filters experimentally.		
Course Title	ELECTRICAL MACHINES LABORATORY – I	Course Code:	EE3311
Course Outcome No	Course Outcome Statement		
CO-1	Construct the circuit with appropriate connections for the given DC machine/transformer.		
CO-2	Experimentally determine the characteristics of different types of DC machines.		
CO-3	Demonstrate the speed control techniques for a DC motor for industrial applications.		
CO-4	Identify suitable methods for testing of transformer and DC machines.		
CO-5	Predetermine the performance parameters of transformers and DC motor.		

Course Title	C PROGRAMMING AND DATA STRUCTURES LABORATORY	Course Code:	CS3362
Course Outcome No	Course Outcome Statement		
CO-1	Use different constructs of C and develop applications.		
CO-2	Write functions to implement linear and non-linear data structure operations		
CO-3	Suggest and use the appropriate linear / non-linear data structure operations for a given problem.		
CO-4	Apply appropriate hash functions that result in a collision free scenario for data storage and Retrieval.		
CO-5	Implement Sorting and searching algorithms for a given application.		
Course Title	PROFESSIONAL DEVELOPMENT	Course Code:	GE3361
Course Outcome No	Course Outcome Statement		
CO-1	Enhanced communication and interpersonal skills crucial for the workplace.		
CO-2	Ability to navigate corporate culture and work effectively in professional settings.		
CO-3	Improved time management, problem solving, and decision-making abilities.		
CO-4	Strategies for career growth and maintaining a healthy work-life balance.		
CO-5	Adapt to change, overcome challenges, and keep learning to work effectively in a changing workplace.		

Semester No :	04		
Course Title	ENVIRONMENTAL SCIENCES AND SUSTAINABILITY	Course Code:	GE3451
Course Outcome No	Course Outcome Statement		
CO-1	To recognize and understand the functions of environment, ecosystems and biodiversity and their conservation.		
CO-2	To identify the causes, effects of environmental pollution and natural disasters and contribute to the preventive measures in the society.		
CO-3	To identify and apply the understanding of renewable and non-renewable resources and contribute to the sustainable measures to preserve them for future generations.		
CO-4	To recognize the different goals of sustainable development and apply them for suitable technological advancement and societal development.		
CO-5	To demonstrate the knowledge of sustainability practices and identify green materials, energy cycles and the role of sustainable urbanization.		

Course Title	TRANSMISSION AND DISTRIBUTION	Course Code:	EE3401
Course Outcome No	Course Outcome Statement		
CO-1	Understand the structure of power system, computation of transmission line parameters for different configurations.		
CO-2	Model the transmission lines to determine the line performance and to understand the impact of Ferranti effect and corona on line performance.		
CO-3	Do Mechanical design of transmission lines, grounding and to understand about the insulators in transmission system.		
CO-4	Design the underground cables and understand the performance analysis of underground cable.		
CO-5	Understand the modeling, performance analysis and modern trends in distribution system.		
Course Title	LINEAR INTEGRATED CIRCUITS	Course Code:	EE3402
Course Outcome No	Course Outcome Statement		
CO-1	Explain monolithic IC fabrication process.		
CO-2	Explain the fabrication of diodes, capacitance, resistance, FETs and PV Cell.		
CO-3	Analyze the characteristics and basic applications (inverting/non-inverting amplifier, summer, differentiator, integrator, V/I and I/V converter) of Op-Amp.		
CO-4	Explain circuit and applications of op-amp based instrumentation amplifier, log/antilog amplifier, analog multiplier /divider, active filters, comparators, waveform generators, A/D and D/A converters.		
CO-5	Explain Functional blocks, characteristics and applications of Timer, PLL, analog multiplier ICs.		
Course Title	MEASUREMENTS AND INSTRUMENTATION	Course Code:	EE3403
Course Outcome No	Course Outcome Statement		
CO-1	Ability to understand the fundamental art of measurement in engineering.		
CO-2	Ability to understand the structural elements of various instruments.		
CO-3	Ability to understand the importance of bridge circuits.		
CO-4	Ability to understand about various transducers and their characteristics by experiments.		
CO-5	Ability to understand the concept of digital instrumentation and virtual instrumentation by experiments.		
Course Title	MICROPROCESSOR AND MICROCONTROLLER	Course Code:	EE3404
Course Outcome No	Course Outcome Statement		
CO-1	To interpret the architecture of 8085&8051.		
CO-2	To study the addressing modes & instruction set of 8085&8051.		
CO-3	To conceptualize commonly used peripheral/interfacing ICs.		
CO-4	To explain the functional block diagram, architecture, and features of the 8051 microcontroller.		
CO-5	Identify and apply various addressing modes and instruction sets used in PIC microcontrollers.		

Course Title	ELECTRICAL MACHINES – II	Course Code:	EE3405
Course Outcome No	Course Outcome Statement		
CO-1	Ability to understand the construction and working principle of Synchronous generator.		
CO-2	Ability to understand the construction and working principle of Synchronous Motor.		
CO-3	Ability to understand the construction and working principle of Three Phase Induction Motor.		
CO-4	Acquire knowledge about the starting and speed control of induction motors.		
CO-5	To gain knowledge about the basic principles and working of Single phase induction motors and Special Electrical Machines.		
Course Title	ELECTRICAL MACHINES LABORATORY – II	Course Code:	EE3411
Course Outcome No	Course Outcome Statement		
CO-1	Ability to understand and analyze EMF and MMF methods		
CO-2	Ability to analyze the characteristics of V and Inverted V curves		
CO-3	Acquire hands on experience of conducting various tests on alternators and obtaining their performance indices using standard analytical as well as graphical methods. to understand the importance of Synchronous machines		
CO-4	Acquire hands on experience of conducting various tests on induction motors and obtaining their performance indices using standard analytical as well as graphical methods. to understand the importance of single and three phase Induction motors		
CO-5	Ability to acquire knowledge on separation of losses		
Course Title	LINEAR AND DIGITAL CIRCUITS LABORATORY	Course Code:	EE3412
Course Outcome No	Course Outcome Statement		
CO-1	Ability to understand and implement Boolean Functions.		
CO-2	Ability to understand the importance of code conversion.		
CO-3	Ability to Design and implement circuits with digital ICs like decoders, multiplexers, register.		
CO-4	Ability to acquire knowledge on Application of Op-Amp.		
CO-5	Ability to Design and implement counters using analog ICs like timers, VCOs and digital ICs like Flip-flops and counters.		
Course Title	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	Course Code:	EE3413
Course Outcome No	Course Outcome Statement		
CO-1	To perform simple assembly language program and study the addressing modes& instruction set of 8085 & 8051.		
CO-2	To develop skills in simple program by writing in assembly languages.		
CO-3	To write an assembly language program to convert Analog input to Digital output and Digital input to Analog output.		
CO-4	To perform inter facing experiments with μP 8085.		
CO-5	To perform interfacing experiments with μC 8051.		

Course Title	ROBOTICS: PROCESS AUTOMATION DEVELOPMENT	Course Code:	SB8026
Course Outcome No	Course Outcome Statement		
CO-1	Design, build, and deploy RPA solutions using industry-leading RPA tools.		
CO-2	Programming to customize and enhance RPA bots.		
CO-3	Organize scalable RPA projects using reusable components, exception handling, and version control in UiPath.		
CO-4	Configure and manage unattended robots and automation jobs using UiPath Orchestrator.		
CO-5	Create and execute test cases for RPA workflows to ensure robot stability and reliable automation.		

Semester No :	05		
Course Title	POWER SYSTEM ANALYSIS	Course Code:	EE3501
Course Outcome No	Course Outcome Statement		
CO-1	Ability to model the power system under steady state operating condition.		
CO-2	To understand and apply iterative techniques for power flow analysis.		
CO-3	Ability to infer the significance of short circuit studies in designing circuit breakers.		
CO-4	Ability to analyze the state of the power system for various unsymmetrical faults.		
CO-5	Ability to analyze the stability of power system using different methods.		
Course Title	POWER ELECTRONICS	Course Code:	EE3591
Course Outcome No	Course Outcome Statement		
CO-1	Understand the operation of semiconductor devices and dynamic characteristics and to design & analyze the low power SMPS.		
CO-2	Analyze the various uncontrolled rectifiers and design suitable filter circuits		
CO-3	Analyze the operation of the n-pulse converters and evaluate the performance parameters.		
CO-4	Understand various PWM techniques and apply voltage control and harmonic elimination methods to inverter circuits.		
CO-5	Understand the operation of AC voltage controllers and its applications.		
Course Title	CONTROL SYSTEMS	Course Code:	EE3503
Course Outcome No	Course Outcome Statement		
CO-1	Represent simple systems in transfer function and state variable forms.		
CO-2	Analyze simple systems in time domain.		
CO-3	Analyze simple systems in frequency domain.		
CO-4	Infer the stability of systems in time and frequency domain.		
CO-5	Interpret characteristics of the system and find out solution for simple control problems.		

Course Title	SPECIAL ELECTRICAL MACHINES	Course Code:	EE3009
Course Outcome No	Course Outcome Statement		
CO-1	Ability to model and analyze power electronic systems and equipment using computational software.		
CO-2	Ability to optimally design magnetics required in special machines based drive systems using FEM based software tools.		
CO-3	Ability to analyse the dynamic performance of special electrical machines		
CO-4	Ability to understand the operation and characteristics of other special electrical machines.		
CO-5	Ability to design and conduct experiments towards research.		
Course Title	ELECTRICAL DRIVES	Course Code:	EE3012
Course Outcome No	Course Outcome Statement		
CO-1	Understand the basic requirements of motor selection for different load profiles.		
CO-2	Analyse the steady state behavior and stability aspects of drive systems.		
CO-3	Analyse the dynamic performance of the DC drive using converter and chopper control.		
CO-4	Simulate the AC drive.		
CO-5	Design the controller for electrical drives.		
Course Title	POWER ELECTRONICS FOR RENEWABLE ENERGY SYSTEMS	Course Code:	EE3014
Course Outcome No	Course Outcome Statement		
CO-1	Examine the available renewable energy sources.		
CO-2	Demonstrate the working principles of electrical machines and power converters used for wind energy conversion system.		
CO-3	Demonstrate the principles of power converters used for solar PV systems.		
CO-4	Examine the available hybrid renewable energy systems.		
CO-5	Simulate AC-DC converters, buck/boost converters, AC-AC converters and PWM inverters.		
Course Title	POWER ELECTRONICS LABORATORY	Course Code:	EE3511
Course Outcome No	Course Outcome Statement		
CO-1	To study the VI characteristics of SCR, TRIAC, MOSFET and IGBT		
CO-2	To analyze the performance of semi converter, full converter, step up, step down choppers by simulation and experimentation.		
CO-3	To study the behavior of voltage waveforms of PWM inverter applying various modulation techniques.		
CO-4	To design and analyze the performance of SMPS.		
CO-5	To study the performance of AC voltage controller by simulation and Experimentation.		

Course Title	CONTROL AND INSTRUMENTATION LABORATORY	Course Code:	EE3512
Course Outcome No	Course Outcome Statement		
CO-1	To model and analyze simple physical systems and simulate the performance in analog and digital platform.		
CO-2	To design and implement simple controllers in standard forms.		
CO-3	To design compensators based on time and frequency domain specifications.		
CO-4	To design a complete closed control loop and evaluate its performance for simple physical systems.		
CO-5	To analyze the stability of a physical system in both continuous and discrete domains.		
Course Title	Employability Skills Basics	Course Code:	SB3002
Course Outcome No	Course Outcome Statement		
CO-1	Apply fundamental quantitative aptitude concepts to solve numerical problems.		
CO-2	Solve problems related to time, work, probability, and mensuration using analytical skills.		
CO-3	Analyze and solve problems using basic logical reasoning techniques.		
CO-4	Evaluate statements and situations using advanced logical reasoning methods.		
CO-5	Interpret and analyze data from various charts and case studies for decision-making.		

Semester No :	06		
Course Title	PROTECTION AND SWITCHGEAR	Course Code:	EE3601
Course Outcome No	Course Outcome Statement		
CO-1	Understand and select proper protective scheme and type of earthing.		
CO-2	Explain the operating principles of various relays.		
CO-3	Suggest suitable protective scheme for the protection of various power system apparatus.		
CO-4	Analyze the importance of static relays and numerical relays in power system protection.		
CO-5	Summarize the merits and demerits and application areas of various circuit breakers.		
Course Title	POWER SYSTEM OPERATION AND CONTROL	Course Code:	EE3602
Course Outcome No	Course Outcome Statement		
CO-1	Understand the day – to – day operation of power system.		
CO-2	Model and analyse the control actions that are implemented to meet the minute-to minute variation of system real power demand.		
CO-3	Model and analyze the compensators for reactive power control and various devices used for voltage control.		
CO-4	Prepare day ahead and real time economic generation scheduling.		
CO-5	Understand the necessity of computer control of power systems.		

Course Title	MULTILEVEL POWER CONVERTERS	Course Code:	EE3011
Course Outcome No	Course Outcome Statement		
CO-1	Examine the different topologies of multilevel inverters (MLIs) with and without DC link capacitor.		
CO-2	Examine the performance of MLIs with Bipolar Pulse Width Modulation (PWM) Unipolar PWM Carrier-Based PWM Schemes Phase Level Shifted Multicarrier Modulation.		
CO-3	Demonstrate the working principles of Cascaded H-Bridge MLI, diode clamped MLI, flying capacitor MLI and MLI with reduced switch count.		
CO-4	Analyze the voltage balancing performance in Diode clamped MLI.		
CO-5	Simulate three level, capacitor clamped and diode clamped MLI with R and RL load.		
Course Title	HYBRID ENERGY TECHNOLOGY	Course Code:	EE3033
Course Outcome No	Course Outcome Statement		
CO-1	Analyze the impacts of hybrid energy technologies on the environment and demonstrate them to harness electrical power.		
CO-2	Select a suitable Electrical machine for Wind Energy Conversion Systems and simulate wind energy conversion system.		
CO-3	Design the power converters such as AC-DC, DC-DC, and AC-AC converters for SPV systems.		
CO-4	Analyze the power converters such as AC-DC, DC-DC, and AC-AC converters for Hybrid energy systems.		
CO-5	Interpret the hybrid renewable energy systems.		
Course Title	SMART GRID	Course Code:	EE3007
Course Outcome No	Course Outcome Statement		
CO-1	To be able to understand the importance and objectives of Power System Grid.		
CO-2	To be able to know and understand the concept of a smart grid.		
CO-3	To identify and discuss smart metering devices and associated technologies.		
CO-4	To be able to get an overview of Microgrid and Electric Vehicle Technology.		
CO-5	To be able to have an up to date knowledge on the various computing technologies; to understand the role of Big Data and IoT for effective and efficient operation of Smart Grid.		
Course Title	POWER SYSTEM LABORATORY	Course Code:	EE3611
Course Outcome No	Course Outcome Statement		
CO-1	Model and analyze the performance of the transmission lines.		
CO-2	Perform power flow, short circuit, and stability analysis for any power system network.		
CO-3	Understand, design, and analyze the load frequency control mechanism.		
CO-4	Perform optimal scheduling of generators and compute the state of the power system.		
CO-5	Understand, analyze, and apply the relays for power system protection.		

Course Title	DRONE BASICS, DESIGN AND ASSEMBLY TEST	Course Code:	SB8065
Course Outcome No	Course Outcome Statement		
CO-1	Skill input about basics of flight, Aerodynamics and theories behind it.		
CO-2	Hands on experience about the parts of drone, working principle and troubleshooting.		
CO-3	Component selection and simulation with selected components.		
CO-4	Assembling the drone parts and testing it after calibration of assembled drone.		
CO-5	Flight test and trimming.		

Semester No :	07		
Course Title	HIGH VOLTAGE ENGINEERING	Course Code:	EE3701
Course Outcome No	Course Outcome Statement		
CO-1	Explain various overvoltage's and its effects on power systems.		
CO-2	Understand the breakdown phenomena in different medium under uniform and non- uniform fields.		
CO-3	Explain the methods of generating and measuring High DC, AC, Impulse voltage and currents.		
CO-4	Suggest and Conduct suitable HV testing of Electrical power apparatus as per Standards.		
CO-5	Explain the Industrial Applications of Electrostatic Fields.		
Course Title	HUMAN VALUES AND ETHICS	Course Code:	GE3791
Course Outcome No	Course Outcome Statement		
CO-1	To create awareness about values and ethics enshrined in the Constitution of India		
CO-2	To sensitize students about the democratic values to be upheld in the modern society.		
CO-3	To inculcate respect for all people irrespective of their religion or other affiliations.		
CO-4	To instill the scientific temper in the students' minds and develop their critical thinking.		
CO-5	To promote sense of responsibility and understanding of the duties of citizen.		
Course Title	PRINCIPLES OF MANAGEMENT	Course Code:	GE3751
Course Outcome No	Course Outcome Statement		
CO-1	Upon completion of the course, students will be able to have clear understanding of managerial functions like planning, organizing, staffing, leading & controlling.		
CO-2	Have same basic knowledge on international aspect of management.		
CO-3	Ability to understand management concept of organizing.		
CO-4	Ability to understand management concept of directing.		
CO-5	Ability to understand management concept of controlling.		

Course Title	IOT CONCEPTS AND APPLICATIONS	Course Code:	OCS352
Course Outcome No	Course Outcome Statement		
CO-1	Explain the concept of IoT.		
CO-2	Understand the communication models and various protocols for IoT.		
CO-3	Design portable IoT using Arduino/Raspberry Pi /open platform		
CO-4	Apply data analytics and use cloud offerings related to IoT.		
CO-5	Analyze applications of IoT in real time scenario.		
Course Title	MECHATRONICS	Course Code:	OMR351
Course Outcome No	Course Outcome Statement		
CO-1	Select sensors to develop mechatronics systems.		
CO-2	Explain the architecture and timing diagram of microprocessor, and also interpret and develop programs.		
CO-3	Design appropriate interfacing circuits to connect I/O devices with microprocessor.		
CO-4	Apply PLC as a controller in mechatronics system		
CO-5	Design and develop the apt mechatronics system for an application.		
Course Title	SMPS and UPS	Course Code:	EE3013
Course Outcome No	Course Outcome Statement		
CO-1	Demonstrate the working of buck boost and buck- boost converters in continuous and discontinuous conduction mode.		
CO-2	Build buck/boost converters using suitable design method.		
CO-3	Analyze the behaviors of isolated DC-DC converters and to design SMPS for battery operated vehicle.		
CO-4	Compute state space averaged model and transfer function for buck, boost and buck- boost converters.		
CO-5	Demonstrate the P, PI and PID controller performance analytically and by simulation for buck boost and buck- boost converters.		
Course Title	BIOTECHNOLOGY FOR WASTE MANAGEMENT	Course Code:	OBT355
Course Outcome No	Course Outcome Statement		
CO-1	To learn the various methods biological treatment		
CO-2	To know the details of waste biomass and its value addition		
CO-3	To develop the bioconversion processes to convert wastes to energy		
CO-4	To synthesize the chemicals and enzyme from wastes		
CO-5	To produce the biocompost from wastes		

Semester No :	08		
Course Title	PROJECT WORK	Course Code:	EE3811
Course Outcome No	Course Outcome Statement		
CO-1	Able to identify, formulate, design, interpret, analyze and provide solution to complex engineering		
CO-2	Able to choose, conduct and demonstrate a knowledge of their selected project topics.		
CO-3	Ability to understand , formulate and propose new learning algorithm to solve engineering problems.		
CO-4	Ability to demonstrate, prepare reports, communicate and work in a team.		
CO-5	Ability to acknowledge the value of continuing education to oneself and to stay up with technology advancements.		



M.I.E.T. ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Accredited by NBA (CIVIL, CSE, ECE, EEE & MECH)

Accredited with 'A+' grade by NAAC

(An ISO 9001:2015 Certified Institution)

(Recognized by UGC under section 2(f) & 12(B) of UGC Act, 1956)

TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Consolidated PO-PSO Mapping for all subjects –Regulation (2021)

Course Name: PROFESSIONAL ENGLISH-I

Course Code: HS3152

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	1	1	1	1	1	3	3	1	3	-	3	-	-
CO-2	1	1	1	1	1	3	3	1	3	-	3	-	-
CO-3	2	3	2	3	2	3	3	2	3	3	3	-	-
CO-4	2	3	2	3	2	3	3	2	3	3	3	-	-
CO-5	2	3	3	3	-	3	3	2	3	-	3	-	-

Course Name: MATRICES AND CALCULUS

Course Code: MA3151

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	1	1	-	-	-	2	-	2	3	-	-
CO-2	3	3	1	1	-	-	-	2	-	2	3	-	-
CO-3	3	3	1	1	-	-	-	2	-	2	3	-	-
CO-4	3	3	1	1	-	-	-	2	-	2	3	-	-
CO-5	3	3	1	1	-	-	-	2	-	2	3	-	-

Course Name: ENGINEERING PHYSICS

Course Code: PH3151

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	2	1	1	1	-	-	-	-	-	-	-
CO-2	3	3	2	1	2	1	-	-	-	-	-	-	-
CO-3	3	3	2	2	2	1	-	-	-	-	1	-	-
CO-4	3	3	1	1	2	1	-	-	-	-	-	-	-
CO-5	3	3	1	1	2	1	-	-	-	-	-	-	-

Course Name: **ENGINEERING CHEMISTRY**

Course Code: **CY3151**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	2	1	-	1	-	-	-	-	1	-	-
CO-2	2	-	-	1	-	2	-	-	-	-	-	-	-
CO-3	3	1	-	-	-	-	-	-	-	-	-	-	-
CO-4	3	1	1	-	-	1	-	-	-	-	-	-	-
CO-5	3	1	2	1	-	2	-	-	-	-	2	-	-

Course Name: **PROBLEM SOLVING AND PYTHON PROGRAMMING**

Course Code: **GE3151**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	2	-	-	-	-	2	2	3	3
CO-2	3	3	3	3	2	-	-	-	-	2	2	3	-
CO-3	3	3	3	3	2	-	-	-	-	2	-	3	-
CO-4	2	2	-	2	2	-	-	-	-	1	-	3	-
CO-5	1	2	-	-	1	-	-	-	-	1	-	2	-

Course Name: **PROBLEM SOLVING AND PYTHON PROGRAMMING
LABORATORY**

Course Code: **GE3171**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	3	-	-	-	-	3	2	3	3
CO-2	3	3	3	3	3	-	-	-	-	3	2	3	-
CO-3	3	3	3	3	2	-	-	-	-	2	-	3	-
CO-4	3	2	-	2	2	-	-	-	-	1	-	3	-
CO-5	1	2	-	-	1	-	-	-	-	1	-	2	-

Course Name: **PHYSICS AND CHEMISTRY LABORATORY**Course Code: **BS3171**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	-	1	-	-	2	-	-	-	-	2	-	-
CO-2	3	1	2	-	-	1	-	-	-	-	1	-	-
CO-3	3	2	1	1	-	-	-	-	-	-	-	-	-
CO-4	2	1	2	-	-	2	-	-	-	-	-	-	-
CO-5	2	1	2	-	1	2	-	-	-	-	1	-	-

Course Name: **PROFESSIONAL ENGLISH - II**Course Code: **HS3251**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	3	3	3	2	3	3	3	-	-
CO-2	3	3	3	3	3	3	3	2	3	3	3	-	-
CO-3	3	3	3	3	3	3	3	2	3	3	3	-	-
CO-4	3	3	3	3	2	3	3	2	3	3	3	-	-
CO-5	-	-	-	-	-	-	-	3	3	3	3	-	-

Course Name: **STATISTICS AND NUMERICAL METHODS**Course Code: **MA3251**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	1	1	1	--	-	2	-	2	3	-	-
CO-2	3	3	1	1	1	-	-	2	-	2	3	-	-
CO-3	3	3	1	1	1	-	-	2	-	2	3	-	-
CO-4	3	3	1	1	1	-	-	2	-	2	3	-	-
CO-5	3	3	1	1	1	-	-	2	-	2	3	-	-

Course Name: **PHYSICS FOR ELECTRICAL ENGINEERING**

Course Code: **PH3202**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	1	-	-	1	-	-	-	-	-	-	-
CO-2	3	2	1	-	-	1	-	-	-	-	-	-	-
CO-3	3	2	1	-	-	1	-	-	-	-	-	-	-
CO-4	3	2	1	-	-	1	-	-	-	-	-	-	-
CO-5	3	2	1	-	-	1	-	-	-	-	-	-	-

Course Name: **BASIC CIVIL AND MECHANICAL ENGINEERING**

Course Code: **BE3255**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	-	-	-	1	-	2	1	2	-	1	-	-
CO-2	2	-	-	-	-	-	2	1	2	-	2	-	-
CO-3	2	-	-	-	-	-	2	2	2	-	2	-	-
CO-4	2	-	-	-	-	-	2	1	2	-	2	-	-
CO-5	2	-	-	-	-	-	2	1	2	-	2	-	-

Course Name: **ENGINEERING GRAPHICS**

Course Code: **GE3251**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	1	2	-	2	-	-	-	3	-	2	2	2
CO-2	3	1	2	-	2	-	-	-	3	-	2	2	2
CO-3	3	1	2	-	2	-	-	-	3	-	2	2	2
CO-4	3	1	2	-	2	-	-	-	3	-	2	2	2
CO-5	3	1	2	-	2	-	-	-	3	-	2	2	2

Course Name: ELECTRIC CIRCUIT ANALYSIS

Course Code: EE3251

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	1	2	-	2	-	-	-	3	-	2	2	2
CO-2	3	1	2	-	2	-	-	-	3	-	2	2	2
CO-3	3	1	2	-	2	-	-	-	3	-	2	2	2
CO-4	3	1	2	-	2	-	-	-	3	-	2	2	2
CO-5	3	1	2	-	2	-	-	-	3	-	2	2	2

Course Name: ENGINEERING PRACTICES LABORATORY

Course Code: GE3271

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	-	-	1	1	-	-	-	-	2	3	3
CO-2	3	2	-	-	1	1	-	-	-	-	2	3	3
CO-3	3	2	-	-	1	1	-	-	-	-	2	3	3
CO-4	3	2	-	-	1	1	-	-	-	-	2	3	3
CO-5	3	2	-	-	1	1	-	-	-	-	2	3	3

Course Name: ELECTRIC CIRCUITS LABORATORY

Course Code: EE3271

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	3	-	1.5	3	-	-	3	3	2
CO-2	3	3	3	3	3	-	1.5	3	-	-	3	3	2
CO-3	3	3	3	3	3	-	1.5	3	-	-	3	3	2
CO-4	3	3	3	3	3	-	1.5	3	-	-	3	3	2
CO-5	3	3	3	3	3	-	1.5	3	-	-	3	3	2

Course Name: **PROBABILITY AND COMPLEX FUNCTIONS**Course Code: **MA3303**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	0	0	0	0	0	2	0	0	2	-	-
CO-2	3	3	0	0	0	0	0	2	0	0	2	-	-
CO-3	3	3	0	0	0	0	0	2	0	0	2	-	-
CO-4	3	3	0	0	0	0	0	2	0	0	2	-	-
CO-5	3	3	0	0	0	0	0	2	0	0	2	-	-

Course Name: **ELECTROMAGNETIC FIELDS**Course Code: **EE3301**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	-	-	-	-	1	-	-	-	1	-	2
CO-2	3	2	1	2	-	-	1	-	-	-	1	-	2
CO-3	3	2	1	2	-	-	1	-	-	-	1	-	2
CO-4	3	2	1	2	-	-	1	-	-	-	1	-	2
CO-5	3	2	1	2	-	-	1	-	-	-	1	-	2

Course Name: **DIGITAL LOGIC CIRCUITS**Course Code: **EE3302**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	1	3	-	1	-	-	-	1	3	-
CO-2	3	3	3	1	3	-	1	-	-	-	1	3	-
CO-3	3	3	3	1	3	-	1	-	-	-	1	3	-
CO-4	3	3	3	1	3	-	1	-	-	-	1	3	-
CO-5	3	3	3	1	3	-	1	-	-	-	1	3	-

Course Name: **ELECTRON DEVICES AND CIRCUITS**

Course Code: **EC3301**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	2	3	2	2	-	1	-	-	1	1	3	-
CO-2	2	2	3	2	2	-	1	-	-	1	1	3	-
CO-3	2	2	3	2	2	-	1	-	-	1	1	3	-
CO-4	2	2	3	2	2	-	1	-	-	1	1	3	-
CO-5	2	2	3	2	2	-	1	-	-	1	1	3	-

Course Name: **ELECTRICAL MACHINES – I**

Course Code: **EE3303**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	1	1	1	-	1	-	-	-	1	3	2
CO-2	3	3	1	1	1	-	1	-	-	-	1	3	1
CO-3	3	3	1	1	1	-	1	-	-	-	1	3	1
CO-4	3	3	1	1	1	-	1	-	-	-	1	3	3
CO-5	3	3	1	1	1	-	1	-	-	-	1	3	3

Course Name: **C PROGRAMMING AND DATA STRUCTURES**

Course Code: **CS3353**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	3	1	2	2	1	-	1	2	1	3	2	1
CO-2	1	2	1	2	2	-	-	1	1	1	2	2	2
CO-3	2	3	1	2	3	-	-	1	1	1	2	2	1
CO-4	2	1	-	-	1	-	-	2	1	1	2	2	3
CO-5	1	2	1	2	2	1	-	1	2	1	3	2	2

Course Name: **ELECTRONIC DEVICES AND CIRCUITS LABORATORY**Course Code: **EC3311**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	-	-	-	3	3	-	1.5	-	-	3	-	-	3
CO-2	-	-	3	3	3	-	1.5	-	-	3	-	-	3
CO-3	-	3	2	3	-	-	1.5	-	-	3	-	-	3
CO-4	-	3	3	3	-	-	1.5	-	-	3	-	-	3
CO-5	-	-	-	-	3	-	1.5	-	-	-	-	-	3

Course Name: **ELECTRICAL MACHINES LABORATORY – I**Course Code: **EE3311**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	1	1	-	-	-	1	-	-	-	3	1
CO-2	3	3	1	1	-	-	-	1	-	-	-	3	3
CO-3	3	3	1	1	-	-	-	1	-	-	-	3	3
CO-4	3	3	1	1	-	-	-	1	-	-	-	2	3
CO-5	3	3	1	1	-	-	-	1	-	-	-	2	3

Course Name: **C PROGRAMMING AND DATA STRUCTURES LABORATORY**Course Code: **CS3362**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	3	1	2	2	1	-	1	2	1	3	2	1
CO-2	1	2	1	2	2	-	-	1	1	1	2	2	2
CO-3	2	3	1	2	3	-	-	1	1	1	2	2	1
CO-4	2	1	-	1	1	-	-	2	1	1	2	2	3
CO-5	1	2	1	2	2	1	-	1	2	1	3	2	2

Course Name: **PROFESSIONAL DEVELOPMENT**

Course Code: **GE3361**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	-	-	-	-	-	-	2	2	2	2	2	2	-
CO-2	-	-	-	-	-	-	2	2	2	2	2	2	-
CO-3	-	-	-	-	-	-	2	2	2	2	2	2	-
CO-4	-	-	-	-	-	-	2	2	2	2	2	2	-
CO-5	-	-	-	-	-	-	2	2	2	2	2	2	-

Course Name: **ENVIRONMENTAL SCIENCES AND SUSTAINABILITY**

Course Code: **GE3451**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	1	-	-	-	2	-	-	-	-	2	-	-
CO-2	3	2	-	-	-	3	-	-	-	-	2	-	-
CO-3	3	-	1	-	-	2	-	-	-	-	2	-	-
CO-4	3	2	1	1	-	2	-	-	-	-	2	-	-
CO-5	3	2	1	-	-	2	-	-	-	-	1	-	-

Course Name: **TRANSMISSION AND DISTRIBUTION**

Course Code: **EE3401**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	1	-	-	-	-	1	-	-	-	-	3	1
CO-2	3	2	1	1	-	1	2	-	-	-	-	3	2
CO-3	3	2	1	1	-	1	2	-	-	-	-	3	3
CO-4	3	2	1	1	-	1	2	-	-	-	-	3	3
CO-5	3	2	1	1	-	1	2	-	-	-	-	3	3

Course Name: **LINEAR INTEGRATED CIRCUITS**Course Code: **EE3402**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	2	3	2	2	-	1	-	-	-	1	3	2
CO-2	2	2	3	2	2	-	1	-	-	-	1	3	2
CO-3	2	2	3	2	2	-	1	-	-	-	1	3	2
CO-4	2	2	3	2	2	-	1	-	-	-	1	3	2
CO-5	2	2	3	2	2	-	1	-	-	-	1	3	2

Course Name: **MEASUREMENTS AND INSTRUMENTATION**Course Code: **EE3403**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	3	-	3	2	2	-	-	-	3	3	3
CO-2	3	2	3	2	-	-	-	-	3	-	3	3	3
CO-3	3	2	3	-	3	2	-	-	-	-	3	3	3
CO-4	3	2	3	-	-	-	2	-	-	-	-	3	3
CO-5	3	2	3	2	3	-	-	-	3	-	3	3	3

Course Name: **MICROPROCESSOR AND MICROCONTROLLER**Course Code: **EE3404**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	1	2	3	-	-	1	-	-	-	3	3	1
CO-2	2	1	2	3	-	-	1	-	-	-	3	3	1
CO-3	2	1	2	3	-	-	1	-	-	-	3	3	1
CO-4	2	1	2	3	-	-	1	-	-	-	3	3	1
CO-5	2	1	2	3	-	-	1	-	-	-	3	3	1

Course Name: ELECTRICAL MACHINES-II

Course Code: EE3405

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	1	2	3	-	-	1	-	-	-	3	3	1
CO-2	2	1	2	3	-	-	1	-	-	-	3	3	1
CO-3	2	1	2	3	-	-	1	-	-	-	3	3	1
CO-4	2	1	2	3	-	-	1	-	-	-	3	3	1
CO-5	2	1	2	3	-	-	1	-	-	-	3	3	1

Course Name: ELECTRICAL MACHINES LABORATORY-II

Course Code: EE3411

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	1	1	-	-	1.5	1	-	-	3	3	3
CO-2	3	3	1	1	-	-	1.5	1	-	-	3	3	3
CO-3	3	3	1	1	-	-	1.5	1	-	-	3	3	3
CO-4	3	3	1	1	-	-	1.5	1	-	-	3	3	3
CO-5	3	3	1	1	-	-	1.5	1	-	-	2	3	3

Course Name: LINEAR AND DIGITAL CIRCUITS LABORATORY

Course Code: EE3412

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	-	-	-	3	-	-	1.5	-	-	3	3	2	1
CO-2	-	-	3	3	-	-	1.5	-	-	3	3	2	1
CO-3	-	3	2	3	3	-	1.5	-	-	3	3	2	1
CO-4	-	3	3	3	3	-	1.5	-	-	3	3	2	1
CO-5	-	-	-	-	-	-	1.5	-	-	-	3	-	-

Course Name: **MICROPROCESSOR AND MICROCONTROLLER LABORATORY** Course Code: **EE3413**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	1	2	3	-	-	1.5	-	-	-	3	3	1
CO-2	2	1	2	3	-	-	1.5	-	-	-	3	3	1
CO-3	2	1	2	3	-	-	1.5	-	-	-	3	3	1
CO-4	2	1	2	3	-	-	1.5	-	-	-	3	3	1
CO-5	2	1	2	3	-	-	1.5	-	-	-	3	3	1

Course Name: **ROBOTICS: PROCESS AUTOMATION DEVELOPMENT**

Course Code: **SB8026**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	-	3	3	3	2	-	-	-	3	-	2	3
CO-2	3	-	3	3	3	2	-	-	-	3	-	2	3
CO-3	3	-	3	3	3	2	-	-	-	3	-	2	3
CO-4	3	-	3	3	3	2	-	-	-	3	-	2	3
CO-5	3	-	3	3	3	2	-	-	-	3	-	2	3

Course Name: **POWER SYSTEM ANALYSIS**

Course Code: **EE3501**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	2	1	1	-	-	1	-	-	-	1	-
CO-2	3	3	3	2	1	-	-	1	-	-	-	1	1
CO-3	3	3	3	2	1	-	-	1	-	-	1	1	1
CO-4	3	2	2	2	2	-	-	1	-	-	1	1	1
CO-5	3	3	2	2	2	-	-	1	-	-	1	1	1

Course Name: **POWER ELECTRONICS**Course Code: **EE3591**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	-	-	1	-	-	3	3	3	3
CO-2	3	3	3	3	-	-	1	-	-	-	-	3	3
CO-3	3	3	3	3	-	-	1	-	-	2	-	3	3
CO-4	3	3	3	3	-	-	1	-	-	2	3	3	3
CO-5	3	3	3	3	-	-	1	-	-	2	3	3	3

Course Name: **CONTROL SYSTEMS**Course Code: **EE3503**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	3	-	1	-	-	-	3	3	3
CO-2	3	3	3	3	3	-	1	-	-	-	3	3	3
CO-3	3	3	3	3	3	-	1	-	-	-	3	3	3
CO-4	3	3	3	3	3	-	1	-	-	-	3	3	3
CO-5	3	3	3	3	3	-	1	-	-	-	3	3	3

Course Name: **SPECIAL ELECTRICAL MACHINES**Course Code: **EE3009**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	-	-	-	-	-	1	-	1	-	1	3	2
CO-2	3	3	3	3	-	-	1	-	2	-	3	3	3
CO-3	3	-	-	-	-	-	1	-	1	-	1	3	3
CO-4	3	3	3	3	-	-	1	-	3	-	3	3	3
CO-5	3	3	3	3	-	-	1	-	3	-	3	3	3

Course Name: ELECTRICAL DRIVES

Course Code: EE3012

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	2	3	3	-	1	-	-	-	2	3	3
CO-2	3	2	2	3	3	-	1	-	-	-	2	3	3
CO-3	3	2	2	3	3	-	1	-	-	-	2	3	3
CO-4	3	2	2	3	3	-	1	-	-	-	2	3	3
CO-5	3	2	2	3	3	-	1	-	-	-	2	3	3

Course Name: POWER ELECTRONICS FOR RENEWABLE ENERGY SYSTEMS

Course Code: EE3014

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	-	2	-	-	-	-	-	2	-	2	3	3
CO-2	3	-	2	-	-	-	-	-	2	-	2	3	3
CO-3	3	-	2	-	-	-	-	-	2	-	2	3	3
CO-4	3	-	3	-	-	-	-	-	2	-	2	3	3
CO-5	3	3	2	3	3	-	3	-	2	-	2	3	3

Course Name: POWER ELECTRONICS LABORATORY

Course Code: EE3511

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	3	-	1.5	-	-	-	3	3	3
CO-2	3	3	3	3	3	-	1.5	-	-	-	3	3	3
CO-3	3	3	3	3	3	-	1.5	-	-	-	3	3	3
CO-4	3	3	3	3	3	-	1.5	-	-	-	3	3	3
CO-5	3	3	3	3	3	-	1.5	-	-	-	3	3	3

Course Name: **CONTROL AND INSTRUMENTATION LABORATORY**Course Code: **EE3512**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	3	-	1.5	-	-	-	2	3	3
CO-2	3	3	3	3	3	-	1.5	-	-	-	2	3	3
CO-3	3	3	3	3	3	-	1.5	-	-	-	2	3	3
CO-4	3	3	3	3	3	-	1.5	-	-	-	3	3	3
CO-5	3	3	3	3	3	-	1.5	-	-	-	2	3	3

Course Name: **EMPLOYABILITY SKILLS BASICS**Course Code: **SB3002**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	-	-	-	3	3	2	2	3	-	2	3	3
CO-2	2	-	-	-	3	3	2	2	3	-	2	3	3
CO-3	2	-	-	-	3	3	2	2	3	-	2	3	3
CO-4	2	-	-	-	3	3	2	2	3	-	2	3	3
CO-5	2	-	-	-	3	3	2	2	3	-	2	3	3

Course Name: **PROTECTION AND SWITCHGEAR**Course Code: **EE3601**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	1	1	2	1	2	1	1	1	2	-	3	1
CO-2	3	1	1	2	1	2	1	1	1	2	-	3	1
CO-3	3	1	1	2	1	2	1	1	1	2	-	3	2
CO-4	3	1	1	2	1	2	1	1	1	2	-	3	2
CO-5	3	1	1	2	2	2	1	1	1	2	-	3	1

Course Name: **POWER SYSTEM OPERATION AND CONTROL**

Course Code: **EE3602**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	1	-	-	-	-	1	-	-	-	2	3	3
CO-2	3	2	1	1	-	1	2	-	2	-	2	3	3
CO-3	3	2	1	1	-	1	2	-	2	-	2	3	3
CO-4	3	2	1	1	-	1	2	-	2	-	2	3	1
CO-5	2	1	-	-	-	-	1	-	2	-	2	3	3

Course Name: **MULTILEVEL POWER CONVERTERS**

Course Code: **EE3011**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	2	3	-	-	1	-	3	-	3	3	3
CO-2	3	2	2	3	-	-	1	-	3	-	3	3	3
CO-3	3	2	2	3	-	-	1	-	3	-	3	3	3
CO-4	3	3	3	3	-	-	1	-	3	-	3	3	3
CO-5	3	3	3	3	3	-	1	-	3	-	3	3	3

Course Name: **HYBRID ENERGY TECHNOLOGY**

Course Code: **EE3033**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	2	-	-	-	-	3	-	3	3	3
CO-2	3	3	3	2	3	-	-	-	3	-	3	3	3
CO-3	3	3	3	2	3	-	-	-	3	-	3	3	3
CO-4	3	3	3	2	3	-	-	-	3	-	3	3	3
CO-5	3	3	3	2	-	-	-	-	3	-	3	3	3

Course Name: SMART GRID

Course Code: EE3007

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	2	3	3	-	1	-	-	-	2	3	3
CO-2	3	3	2	3	3	-	1	-	-	-	2	3	3
CO-3	3	3	2	3	3	-	1	-	-	-	2	3	3
CO-4	3	3	2	3	3	-	1	-	-	-	2	3	3
CO-5	3	3	2	3	3	-	1	-	-	-	2	3	3

Course Name: POWER SYSTEM LABORATORY

Course Code: EE3611

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	2	2	3	-	2	1	2	-	3	3	3
CO-2	3	3	2	2	3	-	2	1	2	-	3	3	3
CO-3	3	3	2	2	3	-	2	1	2	-	3	3	3
CO-4	3	3	2	2	3	-	2	1	2	-	3	3	3
CO-5	3	3	2	2	3	-	2	1	2	-	3	3	3

Course Name: DRONE BASICS, DESIGN AND ASSEMBLY TEST

Course Code: SB8065

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	3	-	3	-	-	-	2	-	-	3	3
CO-2	3	2	3	-	3	-	-	-	2	-	-	3	3
CO-3	3	2	3	-	3	-	-	-	2	-	-	3	3
CO-4	3	2	2	-	3	-	-	-	2	-	-	3	3
CO-5	3	2	2	-	3	-	-	-	2	-	-	3	3

Course Name: **HIGH VOLTAGE ENGINEERING**

Course Code: **EE3701**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	2	2	-	-	-	-	-	-	-	-	-	3	2
CO-2	3	2	-	1	-	-	-	-	-	-	-	3	-
CO-3	2	2	3	1	-	-	-	-	-	2	3	3	2
CO-4	1	2	3	1	-	-	1	1	-	-	3	3	2
CO-5	2	2	1	-	-	2	-	-	-	2	-	3	-

Course Name: **HUMAN VALUES AND ETHICS**

Course Code: **GE3791**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	-	-	-	-	-	2	3	3	2	-	2	-	-
CO-2	-	-	-	-	-	2	3	3	2	-	2	-	-
CO-3	-	-	-	-	-	3	3	3	2	-	2	-	-
CO-4	-	-	-	-	-	3	3	3	2	-	3	-	-
CO-5	-	-	-	-	-	3	3	3	2	-	3	-	-

Course Name: **PRINCIPLES OF MANAGEMENT**

Course Code: **GE3751**

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	-	-	-	-	1	-	-	-	-	-	1	1
CO-2	-	1	1	-	-	-	-	-	-	-	-	1	-
CO-3	1	-	-	2	-	-	-	2	-	1	1	-	2
CO-4	-	1	1	1	2	-	1	2	-	-	-	1	1
CO-5	1	-	-	-	1	1	-	-	3	-	1	-	1

Course Name: IOT CONCEPTS AND APPLICATIONS

Course Code: OCS352

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	2	2	2	1	-	-	-	-	2	2	1
CO-2	3	3	2	2	1	3	-	-	-	-	2	3	3
CO-3	3	3	2	2	2	1	-	-	-	-	3	2	2
CO-4	2	3	3	1	1	3	-	-	-	-	1	1	2
CO-5	2	3	1	1	2	2	-	-	-	-	1	1	1

Course Name: MECHATRONICS

Course Code: OMR351

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	2	1	3	-	2	-	-	-	-	2	3	2
CO-2	3	2	1	3	-	2	-	-	-	-	2	3	2
CO-3	3	2	1	3	-	2	-	-	-	-	2	3	2
CO-4	3	2	1	3	-	2	-	-	-	-	2	3	2
CO-5	3	2	1	3	-	2	-	-	-	-	2	3	2

Course Name: SMPS and UPS

Course Code: EE3013

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	3	3	-	-	3	-	2	-	3	3	3
CO-2	3	3	3	3	-	-	3	-	2	-	3	3	3
CO-3	3	3	3	3	-	-	-	-	3	-	3	3	3
CO-4	3	3	3	3	-	-	-	-	2	-	3	3	3
CO-5	3	3	3	3	-	-	3	-	3	-	3	3	3

Course Code: OBT355

Course Outcomes (COs)	PROGRAMME OUTCOMES(POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO 1	PSO 2
CO-1	3	3	-	-	2	-	1	-	-	-	3	3	3
CO-2	3	3	-	-	2	-	1	-	-	-	3	3	3
CO-3	3	3	-	-	2	-	1	-	-	-	3	3	3
CO-4	3	3	-	-	2	-	1	-	-	-	3	3	3
CO-5	3	3	-	-	2	-	1	-	-	-	3	3	3

Course Code: EE3811

[illegible]