SL NO	COUSRE CODE WITH NAME		COURSE OUT COMES
	MAT101 LINEAR ALGEBRA AND CALCULUS	CO1	solve the system of linear equations, diagonalize matrices and characterise quadratic forms.
		CO2	compute the partial and total derivatives and maxima and minima of multivariable functions
1		CO3	Compute multiple integrals and apply them to find areas and volumes of geometrical shapes, mass and centre of gravity of plane laminas
		CO4	Perform various tests to determine whether a given series is convergent, absolutely convergent or conditionally convergent
		CO5	Determine the Taylor and Fourier series expansion of functions and learn their applications.
		CO1	Compute the quantitative aspects of waves and oscillations in engineering systems.
		CO2	Apply the interaction of light with matter through interference, diffraction and identify these phenomena in different natural optical processes and optical instruments.
2	PHT100 ENGINEERING PHYSICS A	CO3	Analyze the behaviour of matter in the atomic and subatomic level through the principles of quantum mechanics to perceive the microscopic processes in electronic devices.
		CO4	Classify the properties of magnetic materials and apply vector calculus to static magnetic fields and use Maxwell's equations to diverse engineering problems
		CO5	Analyze the principles behind various superconducting applications, explain the working of solid state lighting devices and fibre optic communication system
		CO1	Construct free body diagram and calculate the reactions necessary to ensure static equilibrium.
	EST100	CO2	Study the effect of friction in static and dynamic conditions.
3	ENGINEERING	CO3	Understand the different properties of surfaces in relation to moment of inertia
	MECHANICS	CO4	Analyse and solve different problems of kinematics and kinetics.
		CO5	Analyse and solve with and without damping of SODF.
		CO1	Recall the role of civil engineer in society and to relate the various disciplines of Civil Engineering.
		CO2	Explain different types of buildings, building components, building materials and building construction
		CO3	Describe the importance, objectives and principles of surveying.
		CO4	Summarise the basic infrastructure services MEP, HVAC, elevators, escalators and ramps
	EST120	CO5	Discuss the Materials, energy systems, water management and environment for green buildings.
4	BASICS OF CIVIL &	CO6	Analyse thermodynamic cycles and calculate its efficiency C
-	MECHANICAL	CO7	Illustrate the working and features of IC Engines
	ENGINEERING	CO8	Explain the basic principles of Refrigeration and Air Conditioning
		CO9	Describe the working of hydraulic machinesh graphical representations as per standards.
		CO10	Explain the working of power transmission elements
		CO11	Describe the basic manufacturing, metal joining and machining processes enable the student to effectively communicate basic designs throug

COURSE OUT COME 2019 SCHEME

		CO1	Define and Identify different life skills required in personal and professional life
	HUN 101 LIFE SKILLS	CO2	Develop an awareness of the self and apply well-defined techniques to cope with emotions and stress
5		CO3	Explain the basic mechanics of effective communication and demonstrate these through presentations.
5		CO4	Take part in group discussions
		CO5	Use appropriate thinking and problem solving techniques to solve new problems
		CO6	Understand the basics of teamwork and leadership
		CO1	Develop analytical/experimental skills and impart prerequisite hands on experience for engineering laboratories
		CO2	Understand the need for precise measurement practices for data recording
6	PHL 120 ENGINEERING	CO3	Understand the principle, concept, working and applications of relevant technologies and comparison of results with theoretical calculations
	PHYSICS LAB	CO4	Analyze the techniques and skills associated with modern scientific tools such as lasers and fiber optics
		CO5	Develop basic communication skills through working in groups in performing the laboratory experiments and by interpreting the results
		CO1	Name different devices and tools used for civil engineering measurements
		CO2	Explain the use of various tools and devices for various field measurements
		CO3	Demonstrate the steps involved in basic civil engineering activities like plot measurement, setting out operation, evaluating the natural profile of land, plumbing and undertaking simple construction work.
7	ESL 120 CIVIL &	CO4	plumbing.
	MECHANICAL WORKSHOP	CO5	Compare different techniques and devices used in civil engineering measurements
		CO6	Identify Basic Mechanical workshop operations in accordance with the material and objects
		CO7	Apply appropriate Tools and Instruments with respect to the mechanical workshop trades
		CO8	Apply appropriate safety measures with respect to the mechanical workshop trades
		CO1	Compute the derivatives and line integrals of vector functions and learn their applications
	MAT 102 VECTOR CALCULUS, DIFFERENTIAL EQUATIONS AND TRANSFORM	CO2	Evaluate surface and volume integrals and learn their inter-relations and applications
8		CO3	Solve homogeneous and non-homogeneous linear differential equation with constant coefficients
		CO4	compute Laplace transforms and apply them to solve problems arising in engineering
		CO5	Determine the Fourier transforms of functions and apply them to solve problems
		CO1	Apply the basic concepts of electrochemistry and corrosion to explore its possible applications in various engineering fields
		CO2	Understand various spectroscopic techniques like UV-Visible, IR, NMR and its applications.
9	CYT 100 ENGINEERING CHEMISTRY	CO3	Apply the knowledge of analytical method for characterizing a chemical mixture or a compound. Understand the basic concept of SEM for surface characterisation of nanomaterials
		CO4	Learn about the basics of stereochemistry and its application. Apply the knowledge of conducting polymers and advanced
			polymers in engineering.
		CO5	Study various types of water treatment methods to develop skills for treating wastewater.

	EST 110 ENGINEEDING	CO1	Draw the projection of points and lines located in different quadrants
		CO2	Prepare multiview orthographic projections of objects by visualizing them in different positions
		CO3	Draw sectional views and develop surfaces of a given object
10	CDADHICS	CO4	Prepare pictorial drawings using the principles of isometric and perspective projections to visualize objects in three
	UKAFIICS	004	dimension
		CO5	Convert 3D views to orthographic views
		CO6	Obtain multiview projections and solid models of objects using CAD tools
		CO1	Apply fundamental concepts and circuit laws to solve simple DC electric circuits
		CO2	Develop and solve models of magnetic circuits
11	EST 150 BASICS OF	CO3	Apply the fundamental laws of electrical engineering to solve simple ac circuits in steady state
	ELECTRICAL AND	CO4	Describe working of a voltage amplifier
	ELECTRONICS ENGINEERING	CO5	Outline the principle of an electronic instrumentation system
		CO6	Explain the principle of radio and cellular communication
		CO1	Develop vocabulary and language skills relevant to engineering as a profession
		CO2	Analyze, interpret and effectively summarize a variety of textual content
12	HUN 102 PROFESSIONAL	CO3	Create effective technical presentations
12	COMMUNICATION	CO4	Discuss a given technical/non-technical topic in a group setting and arrive at generalizations/consensus
		CO5	Identify drawbacks in listening patterns and apply listening techniques for specific needs
		CO6	Create professional and technical documents that are clear and adhering to all the
		CO1	Analyze a computational problem and develop an algorithm/flowchart to find its solution
		col	Develop readable* C programs with branching and looping statements, which uses Arithmetic, Logical, Relational or Bitwise
		02	operators.
12	EST 102 DROCD A MING IN C	CO3	Write readable C programs with arrays, structure or union for storing the data to be processed
15	EST 102 FROORAMING IN C	CO4	Divide a given computational problem into a number of modules and develop a readable multi-function C program by using
			recursion if required, to find the solution to the computational problem
		CO5	Write readable C programs which use pointers for array processing and parameter passing
		CO6	Develop readable C programs with files for reading input and storing output
		CO 1	Understand and practice different techniques of quantitative chemical analysis to generate experimental skills and apply
			these skills to various analyses
		CO 2	Develop skills relevant to synthesize organic polymers and acquire the practical skill to use TLC for the identification of
			drugs
	CVL 120 ENCINEEDING	CO 3	Develop the ability to understand and explain the use of modern spectroscopic techniques for analysing and interpreting the
14	CYL 120 ENGINEERING		IR spectra and NMR spectra of some organic compounds
	CHEMISTRY LAB	CO 4	Acquire the ability to understand, explain and use instrumental techniques for chemical analysis
		CO 5	
		005	Learn to design and carry out scientific experiments as well as accurately record and analyze the results of such experiments
		COL	Function as a member of a team, communicate effectively and engage in further learning. Also understand how chemistry

		CO1	Demonstrate safety measures against electric shocks.
15	ESL 130 ELECTRICAL & ELECTRONICS WORKSHOP	CO2	Identify the tools used for electrical wiring, electrical accessories, wires, cables, batteries and standard symbols.
		CO3	Develop the connection diagram, identify the suitable accessories and materials necessary for wiring simple lighting circuits for domestic buildings.
		CO4	The student will be able to Identify and test various electronic components
		CO5	The student will be able to Draw circuit schematics with EDA tools
		CO6	The student will be able to Assemble and test electronic circuits on boards
		CO1	Understand the concept and the solution of partial differential equation.
		CO2	Analyse and solve one dimensional wave equation and heat equation.
	MAT 201 COURSE NAME	CO3	Understand complex functions, its continuity differentiability with the use of CauchyRiemann equations.
16	EQUATIONS AND COMPLEX	CO4	Evaluate complex integrals using Cauchy's integral theorem and Cauchy's integral formula, understand the series expansion of analytic function
	ANALYSIS	CO5	Understand the series expansion of complex function about a singularity and Apply residue theorem to compute several kinds of real integrals.
		CO1	Apply circuit theorems to simplify and solve complex DC and AC electric networks.
		CO2	Analyse dynamic DC and AC circuits and develop the complete response to excitations.
		CO3	Solve dynamic circuits by applying transformation to s-domain.
17	EET201 CIRCUITS AND NETWORKS	CO4	Analyse three-phase networks in Y and Δ configurations.
		CO5	Solve series /parallel resonant circuits.
		CO6	Develop the representation of two-port networks using network parameters and analyse.
		CO 1	Identify and analysethe factors affecting performance of measuring system
		CO 2	Choose appropriate instruments for the measurement of voltage, current in ac and dc measurements
18	EET203 MEASUREMENTS	CO 3	Explain the operating principle of power and energy measurement
	AND INSTRUMENTATION	CO 4	Outline the principles of operation of Magnetic measurement systems
		CO 5	Describe the operating principle of DC and AC bridges, transducersbased systems.
		CO 6	Understand the operating principles of basic building blocks of digital systems, recording and display units
		CO1	Design biasing scheme for transistor circuits.
		CO2	Model BJT and FET amplifier circuits.
19	EET205 ANALOG ELECTRONICS	CO3	Identify a power amplifier with appropriate specifications for electronic circuit applications.
		CO4	Describe the operation of oscillator circuits using BJT.
		CO5	Explain the basic concepts of Operational amplifier (OPAMP)
		CO6	Design and develop various OPAMP application circuits and 555 timer circuits

	HUT 200 Professional Ethics	CO1	Understand the core values that shape the ethical behaviour of a professional.
		CO2	Adopt a good character and follow an ethical life.
20		CO3	Explain the role and responsibility in technological development by keeping personal ethics and legal ethics
		CO4	Solve moral and ethical problems through exploration and assessment by established experiments.
		CO5	Apply the knowledge of human values and social values to contemporary ethical values and global issues
	MCN201 SUSTAINABLE	CO1	Understand the relevance and the concept of sustainability and the global initiatives in this direction
		CO2	Explain the different types of environmental pollution problems and their sustainable solutions
21		CO3	Discuss the environmental regulations and standards
	ENGINEEKING	CO4	Outline the concepts related to conventional and non-conventional energy
		CO5	Demonstrate the broad perspective of sustainable practices by utilizing engineering knowledge and principles
		CO1	Analyse voltage current relations of RLC circuits
		CO2	Verify DC network theorems by setting up various electric circuits
		602	Measure power in a single and three phase circuits by various methods
		03	Calibrate various meters used in electrical systems
22	EEL201 CIRCUITS AND MEASUREMENTS LAB	CO4	Calibrate various meters used in electrical systems
		CO5	Determine magnetic characteristics of different electrical devices
		CO6	Analyse the characteristics of various types of transducer systems
		CO7	Determine electrical parameters using various bridges
		C08	Analyse the performance of various electronic devices for an instrumentation
		0.00	systems and, to develop the team management and documentation capabilities.
	EEL203 ANALOG ELECTRONICSLAB	CO1	Use the various electronic instruments and for conducting experiments.
		CO2	Design and develop various electronic circuits using diodes and Zener diodes
23		CO3	Design and implement amplifier and oscillator circuits using BJT and JFET.
25		CO4	Design and implement basic circuits using IC (OPAMP and 555 timers).
		CO5	Simulate electronic circuits using any circuit simulation software.
		CO6	Use PCB layout software for circuit design
		COL	Understand the concept, properties and important models of discrete random variables and, using them, analyse suitable
			random phenomena.
	MAT 204 COURSE NAME	CO2	Understand the concept, properties and important models of continuous random variables and, using them, analyse suitable
	PROBABILITY RANDOM		random phenomena.
24	PROCESSES AND	CO3	Analyse random processes using autocorrelation, power spectrum and Poisson process model as appropriate.
	NUMERICAL METHODS	CO4	Compute roots of equations, evaluate definite integrals and perform interpolation on given numerical data using standard
			numerical techniques
		CO5	Apply standard numerical techniques for solving systems of equations, fitting curves on given numerical data and solving ordinary differential equations

		CO1	Acquire knowledge about constructional details of DC machines
	EET202 DC MACHINES AND TRANSFORMERS	CO2	Describe the performance characteristics of DC generators
25		CO3	Describe the principle of operation of DC motors and select appropriate motor types for different applications
25		CO4	Acquire knowledge in testing of DC machines to assess its performance
		CO5	Describe the constructional details and modes of operation of single phase and three phase transformers
		CO6	Analyse the performance of transformers under various conditions
		CO1	Apply vector analysis and coordinate systems to solve static electric and magneticfield problems. Apply Gauss Law,
	EET204 ELECTROMACNETIC	COI	Coulomb's law and Poisson's equation to determine electrostatic field parameters
26	THEOPY	CO2	Determine magnetic fields from current distributions by applying Biot-Savart's law and Amperes Circuital law.
	THEORY	CO3	Apply Maxwell Equations for the solution of timevarying fields
		CO4	Analyse electromagnetic wave propagation in different media
			Identify various number systems, binary codes and formulate digital functions
		CO1	using Boolean algebra
	FET206 DIGITAL	CO2	Design and implement combinational logic circuits.
27	FLECTRONICS	CO3	Design and implement sequential logic circuits.
	ELECTRONICS		Compare the operation of various analog to digital and digital to analog
		CO4	conversion circuits.
		CO5	Explain the basic concepts of programmable logic devices and VHDL.
	EST 200 DESIGN AND ENGINEERING MCN202 COURSE NAME CONSTITUTION OF INDIA	CO1	Explain the different concepts and principles involved in design engineering.
28		CO2	Apply design thinking while learning and practicing engineering.
		CO3	Develop innovative, reliable, sustainable and economically viable designs incorporating knowledge in engineering.
		CO1	Explain the background of the present constitution of India and features.
		CO2	Utilize the fundamental rights and duties.
20		CO3	Understand the working of the union executive, parliament and judiciary.
29		CO4	Understand the working of the state executive, legislature and judiciary.
		CO5	Utilize the special provisions and statutory institutions.
		CO6	Show national and patriotic spirit as responsible citizens of the country
		CO1	Analyse the performance of DC motors and DC generators by performing load test.
		coa	Sketch the Open Circuit Characteristics of a self excited DC shunt generator and check conditions of voltage build up by
		CO2	performing suitable experiment.
30	EEL202 ELECTRICAL	CO3	
	MACHINES LAB I		Develop equivalent circuit and predetermine their regulation and efficiency by performing OC & SC tests on transformer.
		CO4	Analyse the efficiency and regulation of the transformer by performing load test.
		CO5	Analyse the efficiency of a DC machine when working as motor and generator by conducting suitable test.
		CO6	Examine the efficiency by performing Sumpner's test on two similar transformers

		CO1	Formulate digital functionsusing Boolean Algebra and verify experimentally
21	EL204 DIGITAL ELECTRONICS LAB	CO2	Design and implement combinational logic circuits
51		CO3	Design and implement sequential logic circuits
		CO4	Design and fabricate a digital circuit using the knowledge acquired from the laboratory
	EET301 POWER SYSTEMS I	CO1	Identify the power generating system appropriate for a given area
		CO2	Evaluate the electrical performance of any transmission line
32		CO3	Compute various physical characteristics of underground and overhead transmission systems
		CO4	Select appropriate switchgear for protection schemes
		CO5	Design a simple electrical distribution system as per the standards.
		CO1	Describe the architecture and timing diagram of 8085 microprocessor.
	FET202 MICDODDOCEGGODG	CO2	Develop assembly language programs in 8085 microprocessor.
33	EE1303 MICROPROCESSORS	CO3	Identify the different ways of interfacing memory and I/O with 8085 microprocessor.
	AND MICROCONTROLLERS	CO4	Understand the architecture of 8051 microcontroller and embedded systems.
		CO5	Develop assembly level and embedded C programs in 8051 microcontroller.
		CO1	The student will be able to explain the basic operations on signals and systems.
			The student will be able to apply Fourier Series and Fourier Transform
		CO2	concepts for continuous time signals & The student will be able to Analyze the
	EET305 SIGNALS AND SYSTEMS	002	continuous time systems with laplace transform.
34		CO3	The student will be able to analyze various system models and response.
			The student will be able to analyze the discrete time system using Z Transform
		CO4	and sampling.
			The student will be able to apply fourier series and fourier transform concepts
		CO5	for discrete time domain and sampled data systems.
		CO1	Analyse the performance of different types of alternators.
		CO2	Analyse the performance of a synchronous motor.
35	EET30/SYNCHRONOUS AND	CO3	Analyse the performance of different types of induction motors.
	INDUCTION MACHINES	CO4	Describe operating principle of induction machine as generator.
		CO5	Explain the types of single phase induction motors and their working principle.
36	HUT 300		
27	MCN 301 DISASTER		
57	MANAGEMENT		
	EEL 331 MICROPROCESSORS	CO1	Develop and execute assembly language programs for solving arithmetic and logical problems using
38	AND MICROCONTROL LERS		microprocessor/microcontroller.
50	LAB	CO2	Design and Implement systems with interfacing circuits for various applications.
		CO3	Execute projects as a team using microprocessor/microcontroller for real life applications.
	FEL333 ELECTRICAL	CO 1	Analyse the performance of single phase and three phase induction motors by conducting suitable tests.
39	MACHINES LAB II	CO 2	Analyse the performance of three phase synchronous machine from V and inverted V curves.
		CO 3	Analyse the performance of a three phase alternator by conducting suitable tests.

40	EET302 LINEAR CONTROL SYSTEMS	CO1	Describe the role of various control blocks and components in feedback systems.
		CO2	Analyse the time domain responses of the linear systems.
		CO3	Apply Root locus technique to assess the performance of linear systems and design compensators using time domain
		003	techniques.
		CO4	Analyse the stability of the given LTI systems.
		CO5	Analyse the frequency domain response of the given LTI systems and design compensators using time domain and frequency
			domain techniques
		CO1	Apply the per unit scheme for any power system network and compute the fault levels.
		CO2	Analyse the voltage profile of any given power system network using iterative methods
41	EET304 POWER SYSTEMS II	CO3	Analyse the steady state and transient stability of power system networks
		CO4	Model the control scheme of power systems.
		CO5	Schedule optimal generation scheme.
		CO1	Explain the operation of modern power semiconductor devices and its characteristics.
		CO2	Design Analyse the working of controlled rectifiers.
42	EET306 POWERELECTRONICS	CO3	Explain the working of AC voltage controllers, inverters and PWM techniques.
		CO4	Compare the performance of different dc-dc converters.
		CO5	Describe basic drive schemes for ac and dc motors.
		CO1	Explain the basics of anatomy and physiology of human body.
	EET312 BIOMEDICAL	CO2	Explain different techniques for the measurement of various physiological parameters
43		CO3	Describe modern imaging techniques for medical diagnosis
	INSTRUMENTATION	CO4	Identify the various therapeutic equipments used in biomedical field
		CO5	Discuss the patient safety measures and recent advancements in medical field
44	HUT310 MANAGEMENT FOR		
	ENGINEERS		
		CO1	Apply the knowledge of circuit theorems to solve the problems in electrical networks
		CO2	Evaluate the performance of DC machines and Transformers under different loadingconditions
45	EET308 COMPREHENSIVE	CO3	Identify appropriate digital components to realise any combinational or sequential logic.
	COURSE WORK	CO4	Apply the knowledge of Power generation, transmission and distribution to select appropriate components for power system
		005	
		005	Apply appropriate mathematical concepts to analyse continuous time and discrete time signals and systems
46	EEL332 POWER SYSTEMS LAB	CO1	bevelop mathematical models and conduct steady state and transient analysis of power system networks using standard software
		<u> </u>	Develop a frequency domain model of power system networks and conduct the stability analysis
		C02	Develop a nequency domain model of power system networks and conduct the stability analysis.
		<u>CO3</u>	Conduct appropriate tests for any power system component as per standards.
		CO4	Conduct site inspection and evaluate performance ratio of solar power plant.

	L334 POWER ELECTRONICS L	CO1	Determine the characteristics of SCR and design triggering circuits for SCR based
			circuits.
47		CO2	Design, set up and analyse single phase AC voltage controllers.
		CO3	Design, set up and test suitable gate drives for MOSFET/IGBT.
		CO4	Design, set up and test basic inverter topologies.
		CO5	Design and set up dc-dc converters.
		CO1	Develop the state variable representation of physical systems
		CO2	Analyse the performance of linear and nonlinear systems using state variable approach
	EET401 ADVANCED	CO3	Design state feedback controller for a given system
48	CONTROL SYSTEMS	CO4	Explain the characteristics of nonlinear systems
	CONTROL STSTEMS	CO5	Apply the tools like describing function approach or phase plane approach for assessing the performance of nonlinear systems
		CO6	Apply Lyapunov method for the stability analysis of physical systems.
		CO 1	Explain the fundamental concepts of natural and artificial lighting schemes
40	462 ILLUMINATION TECHNOL	CO 2	Design efficient indoor lighting systems
49	463 ILLUMINATION TECHNOLO	CO 3	Design efficient outdoor lighting systems
		CO 4	Describe aesthetic and emergency lighting systems
		CO1	Describe the theories of accident causation and preventive measures of industrial accidents. (Cognitive Knowledge level:
			Understand)
		CO2	Explain about personal protective equipment, its selection, safety performance & indicators and importance of housekeeping. (Cognitive Knowledge level: Understand)
50	MCN401 INDUSTRIAL	CO3	Explain different issues in construction industries. (Cognitive Knowledge level: Understand)
	SAFETY ENGINERING	CO4	Describe various hazards associated with different machines and mechanical material handling. (Cognitive Knowledge level: Understand)
		CO5	Utilise different hazard identification tools in different industries with the knowledge of different types of chemical hazards. (Cognitive Knowledge level: Apply)
		CO 1	Demonstrate the knowledge of simulation tools for control system design.
51	EL 411 CONTROL SYSTEMS LA	CO 2	Develop the mathematical model of a given physical system by conducting appropriate experiments.
51	EL411 CONTROL STSTEMS LA	CO 3	Analyse the performance and stability of physical systems using classical and advanced control approaches.
		CO 4	Design controllers for physical systems to meet the desired specifications.
		COL	Identify academic documents from the literature which are related to her/his areas of interest (Cognitive knowledge level:
52			Apply).
		CO2	Read and apprehend an academic document from the literature which is related to her/ his areas of interest (Cognitive
	EEQ413 SEMINAR		knowledge level: Analyze).
		CO3	Prepare a presentation about an academic document (Cognitive knowledge level: Create).
		CO4	Give a presentation about an academic document (Cognitive knowledge level: Apply).
		CO5	Prepare a technical report (Cognitive knowledge level:Create).

		COl	Model and solve real world problems by applying knowledge across domains.
54		CO2	Develop products, processes or technologies for sustainable and socially relevant applications.
	EED415 PROJECT PHASE I	CO3	Function effectively as an individual and as a leader in diverse teams and to comprehend and execute designated tasks
		CO4	Plan and execute tasks utilizing available resources within timelines, following ethical and professional norms
		CO5	Identify technology/research gaps and propose innovative/creative solutions
		CO1	Explain the rules and regulations in the design of components for medium and high voltage installations.
	FET402 ELECTRICAL SYSTEM	CO2	Design lighting schemes for indoor and outdoor applications.
53	DESIGN AND ESTIMATION	CO3	Design low/medium voltage domestic and industrial electrical installations.
	DESIGN AND ESTIMATION	CO4	Design, testing and commissioning of 11 kV transformer substation.
		CO5	Design electrical installations in high rise buildings.
		CO 1	Explain the significance and procedure for energy management and audit.
		CO 2	Discuss the energy efficiency and management of electrical loads.
54	ET455 ENERGY MANAGEMEN	CO 3	Discuss the energy efficiency in boilers and furnaces.
		CO 4	Explain the energy management opportunities in HVAC systems
		CO 5	Compute the economic feasibility of the energy conservation measures.
		CO1	Analyse the performance of different types of permanent magnet motors.
	EET426 SDECIAL ELECTRICA	CO2	Analyse the performance of a stepper motor
55	EE1420 SPECIAL ELECTRICA	CO3	Analyse the performance of different types of reluctance motors.
	MACHINES	CO4	Explain the construction and principle of operation of servo motors, single phase motors and linear motors.
		CO5	Analyse the performance of linear induction motors
		CO1	Explain the basic concepts of Conventional, Electric, Hybrid EV and Autonomous Vehicles
	EET410 ELECTRIC AND	CO2	Describe different configurations of electric and hybrid electric drive trains
56	LIVER D VEHICLES	CO3	Discuss the propulsion unit for electric and hybrid vehicles
	HIBRID VEHICLES	CO4	Compare various energy storage and EV charging systems
		CO5	Select drive systems and various communication protocols for EV
57	EET404 COMPREHENSIVE COURSE VIVA	NIL	
		CO1	Model and solve real world problems by applying knowledge across domains (Cognitive knowledge level: Apply).
		CO2	Develop products, processes or technologies for sustainable and socially relevant applications (Cognitive knowledge level:
			Apply).
		CO3	Function effectively as an individual and as a leader in diverse teams and to comprehend and execute designated tasks
58	EED416 PROJECT PHASE II		(Cognitive knowledge level: Apply).
50	EED4101 ROJECT THASE II	CO4	Plan and execute tasks utilizing available resources within timelines, following ethical and professional norms (Cognitive
			knowledge level: Apply).
		CO5	Identify technology/research gaps and propose innovative/creative solutions (Cognitive knowledge level: Analyze).
		CO6	Organize and communicate technical and scientific findings effectively in written and oral forms (Cognitive knowledge level: Apply).