		D	epartment of Electrical & Electronics Engineering
			Semester 3
Sl.No.	Name of the Subject	CO Code	Course Outcomes
		EE201.01	Analyze basic electrical circuits using network theorems
		EE201.02	Analyze electrical circuits using graph theory and formulating network equations based on KVL and KCL in
		EE201.02	topological form.
		EE201.03	Analyze the steady state and transient response of electric circuits Apply Laplace transform in the transient response of electric circuits and the mesh and nodal analysis of coupled
		EE201.04	circuits
	CIRCUITS AND	EE201.05	Evaluate the parameters of two port network and the inter relationship between them
	NETWORKS	EE201.06	Analyze network functions of one port network with two kinds of elements
		EE203.01	Determine the fundamentals of analog integrated circuits and about semiconductor devices.
		EE203.02	Analyze equivalent circuits of amplifiers under different frequencies
		EE203.03	Design multistage amplifiers and power amplifiers
		EE203.04	Create analytical capability to analyse feedback in amplifiers
	ANALOG ELECTRONIC	EE203.05	Differentiate 555 timer, Opamps & their applications
	CIRCUITS	EE203.06	Evaluate the necessary criteria for an oscillator and analyze performance
		EE205.01	Differentiate dc generator types according to their applications
		EE205.02	Determine the working principle of dc motor
		EE205.03	Analyze the performance of Single phase transformer
		EE205.04	analyze the performance of different motors
,	DC MACHINES AND	EE205.05	Detect the principle of operation and performance of three phase transformers
	TRANSFORMERS	EE205.06	Differentiate machines according to various applications
		EE207.01	Develop algorithams and structure of C program.
		EE207.02	create C program by using if, while,, for and break
		EE207.03	Apply the concepts of array and strings in C
		EE207.04	Analyze the problems and implemet them as functions.
	COMPUTER	EE207.05	Develop programs by using structure, union, and pointers
	PROGRAMMING	EE207.06	Develop simple programs using phython.
		HS200.01	Generate critical thinking skills in business situations
		HS200.02	Analyze supply and demand analysis to relevant economic issues.
			Organize investment decisions based on capital budgeting methods in alignment with microeconomic and
		HS200.03	macroeconomic theories.
		HS200.04	analyse the profitability of the firm, economy of operation, determination of price under market situations.
	BUSINESS ECONOMICS	HS200.05	Excute business tools, cost benefit analysis and rate of returns at an elementary level
		MA201.01	Differentiate analytic functions and Harmonic functions.
		MA201.02	Test conformal mapping and find regions that are mapped under certain transformations.
		MA201.03	Check real life definite integrals as application of residue theorem.
		MA201.04	Solve any given system of linear equations.
	LINEAR ALGEBRA AND	MA201.05	Compute the Eigen values of a matrix and how to diagonalize a matrix.

6	COMPLEX ANALYSIS	MA201.06	Test power series as a Taylor series.
			Semester 4
Sl.No.	Name of the Subject	CO Code	Course Outcomes
		EE202.01	Determine alternator types for various industrial applications
			Detect the principle of operation of alternators, its voltage regulation and analyze the performance of alternators for
		EE202.02	different applications.
		EE202.03	analyze the performance of synchronous motors and applications
		EE202.04	Determine the principle of operation and performance of 3 phase Induction Motors
	SYNCHRONOUS AND	EE202.05	Diffrentiate the performance of 3 phase Induction Motors
1	INDUCTION MACHINES	EE202.06	Determine the principle and operation of 1-phase Induction Motors and Induction Generators
		EE204.01	Diffrentiate and number systems, weighted & un-weighted codes, Boolean algebraic calculations
		EE204.02	Create combinational & sequential circuits.
		EE204.03	Design Synchronous counters
		EE204.04	Determine programmable devices
	DIGITAL ELECTRONICS	EE204.05	Implement of various logic circuits using VHDL with knowledge of the same
2	& LOGIC DESIGN	EE204.06	Implement Multiplexers and Demultiplexers in telecommunication field
			: Differentiate the properties and characteristics an behavior of conductors, semiconductors and dielectrics and
		EE 206 .01	insulators.
		EE 206 .02	Analysis of bearkdowns in solids, liquids and gas
		EE 20(02	Differentiate solar energy materials and superconducting materials and magnetic materials used in electrical machines
		EE 206 .03	and instruments
3	Material Science	EE 206 .04	Apply optical microscopy, electron spectroscopy photoelectron microscopy, atomic absorption spectroscopy for material studies.
5		EE200.04 EE204.01	Determine the fundamental operating principles of measurements of physical variables to electrical engineering
		EE204.02	Differentiate type of measuring instruments their characteristics and functions.
		EE204.03	Identify different measurement methods applied to physical variables
		EE204.04	Analyse the bridge methods applied ac and dc measurements, select suitable methods for specific applications
	MEASURMENTS AND	EE204.05	Apply oscilloscope for test and measurement applications.
4	INSTRUMENTATION	EE204.06	Identify and classify transducers for physical variables and describe their operating principles
		HS210.01	Detect interactions and connections between people place and environment.
		HS210.02	Check perspective of people and organization on a range of geographical issues.
		HS210.02 HS210.03	Determine management of laces and environment.
		HS210.03	Detect difference in human welbeings
		HS210.04	Check changes of ethics .
5	LIFE SKILLS	HS210.05 HS210.06	Determine human values
		MA 202.01	Differentiate discrete and continuous probability density functions and special probability distributions
		MA 202.01 MA 202.02	Excute Laplace transforms
		MA 202.02 MA 202.03	Excute Laplace transforms and their applications in engineering branch.
	PROBABILITY	MA 202.03 MA 202.04	Excute Fourier transforms and their applications in engineering branch.
	DISTRIBUTIONS,	MA 202.04 MA 202.05	
1	TRANSFORMS AND	IVIA 202.05	Explain Numerical methods applications in solving engineering problems.

6	NUMERICAL METHODS	MA 202.06	Explain Laplace transforms applications in engineering branch.
			Semester 5
Sl.No.	Name of the Subject	CO Code	Course Outcomes
		EE301.01	Describe the general layout of power generation and transmission network
		EE301.02	Model individual power system components like transmission lines and generators
		EE301.03	Analyze economics of power generation systems and economic dispatch
	POWER GENEARTION,	EE301.04	Design electrical and mechanical parameters of power system
	TRANSMISSION &	EE301.05	Analyze different types of distribution systems, power quality issues and power conservation measures
1	PROTECTION	EE301.06	Discuss and design various protection schemes
		EE303.01	To explain the various practices of modelling physical systems.
		EE303.02	To differentiate between various control system components and will be able to explain the time domain specifications.
		EE303.03	To develop basic knowledge in error and stability analysis
		EE303.04	Compare and analyse the stability of the systems - thereby having a more realistic approach towards the design of Control systems
	LINEAR CONTROL	EE303.05	To classify and understand the various frequency domain analysis technique in control systems.
2	SYSTEMS	EE303.06	Analyze linear systems for steady state errors, absolute stability and relative stability.
		EE305.01	Study about different types of power semiconductor devices and their switching characteristics and to Choose the appropriate power semiconductor switches for a power electronic circuit.
		EE305.02	Analyze and design the protection circuit of various power semiconductor switches.
		EE305.03	Analyze and design different types of power electronic converters
		EE305.04	Design and choose DualConverter and Inverters suitable for an application
		EE305.05	Illustrate and explain the Choppers and Switching Regulators.
3	POWER ELECTRONICS	EE305.06	Select proper power electronic converter for an application.
		EE307.01	Perform design verification/validation of simple first order and second order continuous-time linear systems in various domains by analytical as well as experimental methods
		EE307.02	Carry out performance evaluation of multi-order LTI System designs by Impulse Response Test
		EE307.03	Evaluate stability and stability margins of a proposed CT-LTI Design by transfer function approach.
		EE307.04	Design simple first-order and second-order systems for basic signal/energy processing applications from given transfer function/ impulse response/ steady-state requirements in electrical and thermal domains.
		EE307.05	Evaluate the signal distortion characteristics of a given transmission channel.
4	SIGNALS AND SYSTEMS	EE307.06	Perform design verification/validation of simple first order and second order discrete-time linear systems by analytical methods
		EE309.01	Use the knowledge about the basics of digital realm in designing a Digital Systems.
		EE309.02	Evaluate microprocessor/controllers from its architecture and assess its suitability in a particular engineering application.
		EE309.03	To make the student capable of programming a processor using assembly language.
		EE309.04	Acquire the competence on configuring and using different peripherals in a digital system.
	Microprocessor and	EE309.05	Develop the skill to compile, debug as well as generate an executable file from a program and burn in the system memory to execute it.
5	Embedded Systems	EE309.06	Design, assemble and test a digital system hardware using microcontroller / processor to solve engineering problems.

		EE367.01	Describe the concepts of different renewable energy sources
		EE367.02	Explain the concepts of anterent renewable energy sources
		EE367.02	Explain the concepts of wind energy based electricity generation systems
		EE367.04	Describe the utilization of different storage technologies
	NEW AND RENEWABLE	EE367.05	Describe the concepts of renewable energy sources like biomass, ocean energy and hydro power generation system
6	SOURCES OF ENERGY	EE367.06	Undersstanding biomass energy, biogas generation, emerging technologies
0	bookens of Erterior	122307.00	Semester 6
Sl.No.	Name of the Subject	CO Code	Course Outcomes
		EE302.01	Implement vector calculus to state electric magnetic fields in different engineering situations.
		EE302.02	Determine maxwell's equation in different Electric feild.
		EE302.03	Determine maxwell's equation in different Magnetic feild.
		EE302.04	Define boundry conditions in mediums.
		EE302.05	Explain the phenomenon of wave propagation in different media and its interface and in applications.
1	ELECTROMAGNETICS	EE302.06	Diffrentiate the nature of EM wave propagation in guided medium.
		EE304.01	Design compensators and controllers using classical techniques.
		EE304.02	Diffrentiate linear and nonlinear system using state space methods.
		EE304.03	Analyses the stability of discrete system.
		EE304.04	Detect describing function analysis of non linearities and stability of non linear system.
	ADVANCED CONTROL	EE304.05	Analyze the graphical approach of non-linear system stability by phase plane trajectories
2	THEORY	EE304.06	Detect Lyapunov stability criterion.
		EE306.01	Check structure of power .
		EE306.02	Diffrentiate load analysis methods (Gauss-Siedel Method, Newton Raphson method and Decoupled load flow method)
		EE306.03	Monitor practical perspective of economic load despatch
		EE306.04	Determine the need of Automatic Generation control
	POWER SYSTEM	EE306.05	Analyse power system stability
3	ANALYSIS	EE306.6	Solve transient stability problem
		EE308.01	Determine the fundamental concepts of various machine drives.
		EE308.02	Detect a drive for a particular application.
		EE308.03	Differentiate control techniques for various drives.
		EE308.04	Determine operation of ac drives
		EE308.05 Determine operation dc drives	
4	ELECTRIC DRIVES	EE308.06	Differentiate applications of ac and dc drives
		EE372.01	Determine the concept of generation of various bioelectric signals like ECG,EEG.
		EE372.02	Explain the electro conduction system of heart and nervous system
		EE372.03	Explain the working of various diagnostic equipment
		EE372.04	Explain patient safety issues related to biomedical instrumentation.
	BIOMEDICAL	EE372.05	Understand measurement principles for blood flow, pressure and volume as well as respiratory variables
5	INSTRUMENTATION	EE372.06	Describe methods and implementation of electrical and nonelectrical medical parameters

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		EE409.03	Acquire knowledge about the design of transformers with performance estimation.
		EE409.04	Acquire knowledge about the design of alternators with performance estimation
l	Electrical	EE409.05	Acquire knowledge about the design of induction machines with performance estimation.
5	Machine Design	EE409.06	Acquire a basic idea about computer aided design (CAD) and finite element method.
		EE465.01	Explain different power quality issues, causes and its mitigation techniques
		EE465.02	To study various methods of power quality monitoring.
		EE465.03	Discuss about the harmonic sources and effect of harmonics on power system equipment and loads
		EE465.04	Explain harmonic elimination, isolation techniques and power factor correction methods
		EE465.05	Measure voltage sag, swell and harmonics and analyze the measured data.
6	Power Quality	EE465.06	Understand power quality monitoring and classification techniques
			Semester 8
Sl.No.	Name of the Subject	CO Code	Course Outcomes
	Special Electric		
1	Machines	EE402.01	To get an overview of some of the special machines for control and industrial applications
	Industrial		
	Instrumentation		
2	&Automation	EE404.01	To impart knowledge about Industrial instrumentation and automation
	Computer		To impart the mode of operation of different types of computer networks that are used to interconnect a distributed
3	Networks	EE468.01	community of computers and various interfacing standards and protocols
	ENVIRONMENTAL	CE482.1	To study the various types of environmental pollution