

**Easwari Engineering College (Autonomous)**  
**Ramapuram 600 089**  
**Department of Electrical and Electronics Engineering**  
**Academic Year: 2020-21**

**Pedagogical Initiatives for Effective Teaching**

**Odd Semester**

<u>S.No</u>	Faculty Name	Topic	Methodology Used	Target Audience	Date
1	Dr.E.Kaliappan	Self & separately excited dc motors	Mind mapping	IV B	21.07.2020
		Principle of vector control	Quiz	IV B	25.08.2020
		Self control of synchronous motor drive system	Simulation	IV B	26.09.2020
		Control of BLDC motor	Brain storming	IV B	13.10.2020
		Phase locked loop control of dc drives	Animation	IV B	10.11.2020
2	Dr. K. Mala	Network Graph	Brain storming session	III B	23.07.2020
		Power system Bus classification	Mind Mapping	III B	06.08.2020
		Bus Impedance Matrix	Chart	III B	12.09.2020
		Line to Line Fault	Animation	III B	30.09.2020
		Swing Equation; Swing Curve	Quiz	III B	19.10.2020
		Lightning	Quiz	IV A	23.07.2020
		corona discharges	Video	IV A	13.08.2020

		Generation of Impulse voltage	Animation	IV A	15.09.2020
		Measurement of High AC	Mind Mapping	IV A	01.10.2020
		Testing of Bushing	Animation	IV A	04.11.2020
3	Dr. R. Karpagam	Snubber circuits	Mind Mapping	III A	21.7.2020
		Turn on and turn off characteristics of IGBT		III A	27.7.2020
		Light dimmer system for solar PV System	Animation	III A	25.8.2020
		step up chopper	simulation	III A	28.8.2020
		Introduction to resonant converters	Flip classes	III A	11.9.2020
		Battery operated vehicles	NPTEL	III A	15.9.2020
		current source inverters	mind mapping	III A	1.10.2020
		multistage sequence source converter simulation		III A	22.10.2020
		matrix converters	simulation	III A	29.10.2020
		welding application	Mind mapping	III A	30.10.2020
		Causes of over voltages	quiz	IV B	20.7.2020
		reflection and refraction travelling waves	nptel	IV B	28.7.2020
		tracking	animation	IV B	20.8.2020
		voltage multiplier circuit	model	IV B	27.8.2020
		surface and space charge analysis	FEA	IV B	10.8.2020
		reflection and refraction travelling waves	NPTEL	IV B	28.7.2020
		corona discharge	animation	IV B	18.8.2020
cascaded transformer	mind mapping	IV B	1.9.2020		

		martz circuit	simulation	IV B	3.9.2020
		insulation coordination	simulation	IV B	29.10.2020
4	Dr. P. Marish Kumar	Types of RE sources	Mind mapping	IV A &B	22.07.2020
		Environmental consequences of fossil fuel use, Importance of renewable sources of energy	Brainstorming session	IV A &B	24.07.2020
		Types of Wind Power Plants(WPPs)	Chart display	IV A &B	11.08.2020
		Working of WPPs	Animation videos	IV A &B	18.08.2020
		Types of PV Systems- Types of Solar Cell	Mind mapping	IV A &B	15.09.2020
		Unit I,II,III	Quiz	IV A &B	18.09.2020
		Environmental Benefits of Biomass	Seminar	IV A &B	29.09.2020
		Classification of hydropower schemes, Classification of water turbine	mind mapping	IV A &B	13.10.2020
		Hybrid energy sources	Flash cards	IV A &B	14.11.2020
		Fuel Energy Sources	group presentation	IV A &B	03.11.2020
		number systems	Mind Mapping	II A & B	15.07.2020
		Hamming code - Error detection and correction codes	Flipped Class Room	II A & B	04.08.2020
		Digital Logic Families	Quiz	II A & B	06.08.2020
		K-map representations and minimization using K maps POS form	Flipped Class Room	II A & B	19.08.2020

		Multiplexers, Demultiplexers	Mind Mapping	II A & B	02.09.2020
		Code converter	Quiz	II A & B	08.09.2020
		Flip flops	Quiz	II A & B	16.09.2020
		Design of synchronous sequential circuits	Flipped Class Room	II A & B	24.09.2020
		Design of Asynchronous sequential circuits	Flipped Class Room	II A & B	16.10.2020
		VHDL & RTL	Mind Mapping	II A & B	17.11.2020
5	Mrs. D. Chandrakala	Interrupt Structures and its types	Mind Mapping	III B	05.08.2020
		Data transfer concepts	Flash Card	III B	29.07.2020
		8085 - Instruction Set	Mind Mapping	III B	20.08.2020
		Programming execution using 8085 Simulator	Simulation	III B	25.08.2020
		8051 - Instruction set	Mind Mapping	III B	10.09.2020
		Interfacing with 8255, 8254, 8259, 8279	Quiz	III B	13.09.2020
		ADC and DAC interfacing with 8085 and 8051	Mind Mapping	III B	23.10.2020
		Comparison between 8085 and 8051	Flipped Class Room	III B	27.10.2020
		Applications to Automation System	Flipped Class Room	III B	10.11.2020
		Servomotor and Stepper motor	Quiz	III B	12.11.2020

		Load Curves And Basic Concepts Of Load Dispatching	Flash Card	IV A	24.07.2020
		Regulation Of Two Generators In Parallel	Flipped Class Room	IV A	07.08.2020
		Real Power - Frequency Control	Mind Mapping	IV A	20.08.2020
		Single And Two Area System	Quiz	IV A	27.08.2020
		Methods Of Reactive Power Injection	Mind Mapping	IV A	17.09.2020
		Reactive Power – Voltage Control	Quiz	IV A	10.09.2020
		Economic Dispatch	Mind Mapping	IV A	10.10.2020
		Special aspects of short and long term hydro thermal problems	Flipped Class Room	IV A	16.10.2020
		Scada And Ems	Quiz	IV A	16.11.2020
		State Transition Diagram	Flipped Class room	IV A	26.11.2020
6	Dr. D. Fathema Farzana	Power scenario in India	Flipped Classroom	III A	15.07.2020
		Single line diagram and bus admittance matrix	Quiz	III A	24.07.2020
		Power flow solution	Software simulation	III A	26.08.2020
		Sequence networks	Mind mapping	III A	30.09.2020
		Critical clearing angle and time	Quiz	III A	06.11.2020

		National and Regional load dispatching centers	Flipped Classroom	IV B	16.07.2020
		load curves and basic concepts of load dispatching	flash card	IV B	28.07.2020
		Single And Two Are System	Quiz	IV B	13.08.2020
		Automatic Voltage Regulator	Animation	IV B	04.09.2020
		Methods Of Reactive Power Injection	Mind mapping	IV B	17.09.2020
		Economic Dispatch	Mind mapping	IV B	06.10.2020
		Special aspects of short and long term hydro thermal problems	Flipped Classroom	IV B	16.10.2020
7	Mrs. N. Priya	Coordinate Systems	Chart	II B	17.07.2020
		Guass law	Mind mapping	II B	04.08.2020
		Electric field	Chart	II B	10.08.2020
		Resistance and capacitance	Quiz	II B	24.08.2020
		Magnetic field	Quiz	II B	31.08.2020
		Magnetic energy density	Brain storming	II B	18.09.2020
		Transformer and motional emf	Mind mapping	II B	25.09.2020
		Maxwells equations	Quiz	II B	13.10.2020
		Plane waves	Mind mapping	II B	27.10.2020
		Plane wave -reflection	Quiz	II B	06.11.2020
		Classes of Duty	Flash card	II Mech A	29.07.2020
		Selection of Power rating for drive motors motor	Mind mapping	II Mech A	31.07.2020

		Braking of Single phase induction motors.	Chart	II Mech A	19.08.2020
		Braking of Three phase induction motors.	Chart	II Mech A	21.08.2020
		DC Motor starters	Flash card	II Mech A	28.08.2020
		AC motor starters	Mind mapping	II Mech A	07.09.2020
		Phase controlled rectifier fed DC Drives	Quiz	II Mech A	25.09.2020
		Chopper controlled rectifier fed DC drives	Mind mapping	II Mech A	05.10.2020
		Speed control of three phase induction motor	Flash card	II Mech A	12.10.2020
		Slip Power Recovery Scheme	Mind mapping	II Mech A	21.10.2020
8	Mr. K. V. Thilagar	Snubber circuits	Animation	III B	29.7.2020
		Turn on and turn off characteristics of IGBT	NPTEL	III B	3.8.2020
		Light dimmer system for solar PV System	Animation	III B	2.11.2020
		step up chopper	simulation	III B	31.8.2020
		Introduction to resonant converters	Flip classes	III B	14.9.2020
		Battery operated vehicles	nptel	III B	16.9.2020
		current source inverters	mind mapping	III B	5.10.2020
		multistage sequence source converter	simulation	III B	6.10.2020
		matrix converters	simulation	III B	06.11.2020
		welding application	Mind mapping	III B	08.11.2020
9	Mrs. J. Lydia	Coordinate Systems	Chart	II A	20.7.2020

		Guass law	Mind mapping	II A	4.8.2020
		Electric field	Chart	II A	11.8.2020
		Resistance and capacitance	Quiz	II A	25.8.2020
		Magnetic field	Chart	II A	5.9.2020
		Magnetic energy density	Brain storming	II A	15.9.2021
		Transformer and motional emf	Mind mapping	II A	21.9.2021
		Maxwells equations	Quiz	II A	29.9.2020
		Plane waves	Mind mapping	II A	23.10.2020
		Plane wave -reflection	Quiz	II A	2.11.2020
		Disaster & its types	Quiz	IV B	20.7.2020
		Do's and donts during disasters	Mind mapping	IV B	5.8.2020
		Roles & responsibilities of panchayati raj institutions	Mind mapping	IV B	13.8.2020
		Early warning systems	Flash cards	IV B	26.8.2020
		Impacts of development projects	Quiz	IV B	2.9.2020
		Climate change adaptation	Mind mapping	IV B	9.9.2020
		Components of disaster relief	Flash cards	IV B	21.9.2020
		Institutional arrangements mitigation	Mind mapping	IV B	24.9.2020
		Earthquake	Case study	IV B	14.10.2020
		Floods	Case study	IV B	29.10.2020
10	Mrs. K. A. Indu Sailaja	Classification of signals, Classification systems	Mind mapping	III A	28.07.2020
		Unit I	Quiz	III A	11.08.2020



	Z Transform and properties	Brainstorming session	III A	17.08.2020
	Sampling, Quantization	Seminar	III A	05.08.2020
	Fourier Transform and properties	Brainstorming session	III A	09.09.2020
	Butterfly structure	Flow chart Chart display	III A	25.09.2020
	Realization of Filters	Flash cards	III A	14.10.2020
	Windowing Techniques	mind mapping, Flash cards	III A	20.10.2020
	Addressing Formats	Teaching with case studies	III A	06.11.2020
	Introduction to Commercial DS Processors	group presentation	III A	08.11.2020
	Classification of signals, Classification systems	Mind mapping	III B	21.07.2020
	Unit I	Quiz	III B	13.08.2020
	Z Transform and properties	Brainstorming session	III B	18.08.2020
	Sampling, Quantization	Seminar	III B	08.08.2020
	Fourier Transform and properties	Brainstorming session	III B	9.09.2020
	Butterfly structure	Flow chart Chart display	III B	25.09.2020
	Realization of Filters	Flash cards	III B	07.10.2020
	Windowing Techniques	mind mapping, Flash cards	III B	10.10.2020
	Addressing Formats	Teaching with case studies	III B	07.11.2020

		Introduction to Commercial DS Processors	group presentation	III B	08.11.2020
11	Mr.P.Pushpakarthick	PN junction Devices	Animation	II B	17.07.2020
		Power Amplifiers	Mind Mapping	II B	24.09.2020
		Power Amplifiers	Quiz	II B	24.09.2020
		Feedback Amplifiers	Quiz	II B	25.09.2020
12	Mr. G. Vignesh	Functional Blocks of 8085	Animation	III A	21.07.2020
		Timing Diagrams of 8085	Virtual Flash Cards	III A	07.08.2020
		Data Transfer Instructions	Mind Mapping	III A	13.08.2020
		8085 programming	Simulation tools	III A	25.08.2020
		Functional Block of 8051	Animation	III A	03.09.2020
		Data Transfer and Manipulation Concepts	Mind Mapping	III A	10.09.2020
		ADC Interfacing	Model based	III A	5.10.2020
		DAC Interfacing	Quiz	III A	6.10.2020
		8051 Applications to Automation	Demo (Flip Class)		29.10.2020
		Programming Process	Mind mapping	II - EST	02.09.2020
		Debugging and Optimization	Simulation CCS	II - EST	09.09.2020
		GNU - Debugger	Simulation CCS	II - EST	16.09.2020
		Embedded C Programming	Live Program Example	II - EST	21.10.2020

		UART (TMS320)	Model Based	II - EST	21.11.2020
		Intruder Alarm	Case Study	II - EST	09.11.2020
		Java Cards	Quiz	II - EST	17.11.2020
13	Ms. B. Ponkarthika	Disaster & its types	Quiz	IV A	20.07.2020
		Roles & responsibilities of panchayati raj institutions	Mind mapping	IV A	17.08.2020
		National disaster management authority	Flow chart	IV A	20.08.2020
		Climate change adaptation	Mind mapping	IV A	16.09.2020
		Forest fire & manmade disaster	case studies	IV A	19.11.2020
		IC fabrication	Animation	II A & B	21.07.2020
		OP- amp characteristics	Mind mapping	II A & B	11.08.2020
		Applications of op amp	Quiz	II A & B	27.08.2020
		Waveform generators	Simulation	II A & B	11.09.2020
		555 Timer	Brain storming	II A & B	29.09.2020

**Even Semester**

<u>S.No</u>	<b>Faculty Name</b>	<b>Topic</b>	<b>Methodology Used</b>	<b>Target Audience</b>	<b>Date</b>
1	Dr.E.Kaliappan	Trends & issues in Management	Quiz	IV EEE A & B	19.01.2021
		Strategic Management	Mind Mapping	IV EEE A & B	27.01.2021
		Human Resource Management	Flipped classroom	IV EEE A &B	04.02.2021
		Process of Communication	Inquiry based learning	IV EEE A & B	12.02.2021
		IT in Management control	Learning through play	IV EEE A & B	18.02.2021
2	Dr. K. Mala	Short duration voltage variations	Flash cards	III EEE A	25.01.2021
		Lightning	Brainstorming session	III EEE A	08.03.2021
		Harmonics Vs transients	Quiz	III EEE A	17.03.2021
		Fundamentals of load compensation	Mind mapping	III EEE A	27.04. 2021
		Reactive power compensation	Collaborative learning	III EEE A	14.06. 2021
		Structure of Power System	Mind Mapping	II EEE A	20.01.2021
		Phasor diagram of Medium Transmission line	Brainstorming session	II EEE A	17.02.2021
		Improvement of string efficiency of insulator	Flipped class	II EEE A	18.03.2021
		DC Distributors	collaborative learning	II EEE A	12.05. 2021
		Sag and Tension of transmission line	Brainstorming session	II EEE A	10.06. 2021
3	Dr. R. Karpagam	Bio active potential	Animation	IV EEE A & B	11.01.2021
		Transducers	Quiz	IV EEE A & B	18.01.2021

		Different methods of Cardiac output	Flash cards	IV EEE A & B	20.01.2021
		Fick;method	Flow chart	IV EEE A & B	21.01.2021
		Amplifiers	Flipped class	IV EEE A & B	01.02.2021
		Biomedecial electrodes	Flash cards	IV EEE A & B	03.02.2021
		Different methods of finding imaging techniques	Brainstorming session	IV EEE A & B	05.02.2021
		Applications	group presentation	IV EEE A & B	10.02.2021
		Pace makers	Animation	IV EEE A & B	11.02.2021
		Heart lung machines	real time entities	IV EEE A & B	15.02.2021
		Electrical Drives	Flipped class	III EEE A	22.01. 2021
		Selection of motor	Teaching with case studies	III EEE A	05.02. 2021
		4 quadrant operation of chopper fed DC drives	Flash cards	III EEE A	18.02. 2021
		Static Scherbius Drive	Flipped class	III EEE A	18.03. 2021
		Field weakening mode	Flash cards	III EEE A	22.03. 2021
		Permanent magnet synchronous motor	Brainstorming session	III EEE A	26.03. 2021
		Transfer function for dc motor	Flipped class	III EEE A	30.03. 2021
4	Dr. P. Marish Kumar	Energy accounting - Energy monitoring, targeting and reporting	group presentation	IV EEE A & B	12.01. 2021
		Energy audit, Need for Energy audit, Types of Energy Audit	Flipped class	IV EEE A & B	17.01. 2021
		Energy Audit process	Brainstorming session	IV EEE A & B	18.01. 2021

		Forms of cogeneration	Flipped class	IV EEE A & B	22.01. 2021
		Ballasts	real time entities	IV EEE A & B	29.01. 2021
		Lighting controls	Teaching with case studies	IV EEE A & B	03.02. 2021
		Metering for energy Management	Teaching with case studies	IV EEE A & B	03.02. 2021
		Utility monitoring and control system	real time entities	IV EEE A & B	16.02. 2021
		Economic analysis - Economic models - Applications and Limitations-	Brainstorming session	IV EEE A & B	17.02. 2021
		Electrical Drives	Flipped class	III EEE A	22.01. 2021
		Selection of motor	Teaching with case studies	III EEE A	05.02. 2021
		4 quadrant operation of chopper fed DC drives	Flash cards	III EEE A	18.02. 2021
		Static Scherbius Drive	Flipped class	III EEE A	18.03. 2021
		Field weakening mode	Flash cards	III EEE A	22.03. 2021
		Permanent magnet synchronous motor	Brainstorming session	III EEE A	26.03. 2021
		Transfer function for dc motor	Flipped class	III EEE A	30.03. 2021
		Current Controller	Flipped Class	III EEE A	16.04. 2021
		Design of Speed Controller	Flipped Class	III EEE A	04.05. 2021
5	Mrs. D. Chandrakala	Static and dynamic characteristics	Flash Cards	II EEE B	21.01. 2021
		Errors in measurements	Flipped Classroom	II EEE B	27.01. 2021
		Single & three phase energy meter	Quiz	II EEE B	17.02. 2021

		Instrument transformers	Animation	II EEE B	03.03. 2021
		Bridges	Mind Mapping	II EEE B	24.03. 2021
		Electrostatic and electromagnetic Interference	Quiz	II EEE B	31.03. 2021
		Magnetic Tape recorder	Animation	II EEE B	08.04. 2021
		CRO	nptel video	II EEE B	23.04. 2021
		Transducer	Mind Mapping	II EEE B	13.05. 2021
		Thermal Imagers	Flipped Classroom	II EEE B	21.05. 2021
		3 stage Pipeline Organization	NPTEL Video	I ME EST	08.01. 2021
		ARM Development Tools	NPTEL Video	I ME EST	18.01. 2021
		ARM Instruction set	Mind mapping	I ME EST	22.01. 2021
		Conditional Statements	Flash Card	I ME EST	12.02. 2021
		Memory Management	NPTEL Video	I ME EST	17.02. 2021
		Advanced Microcontroller Bus Architecture	NPTEL Video	I ME EST	19.02. 2021
		CP15 Protection Unit Registers	Mind mapping	I ME EST	09.03. 2021
		CP15 MMU Register	Mind mapping	I ME EST	12.03. 2021
		ARM-programming-data transfer	ARMSIM simulator	I ME EST	12.03. 2021
		ARM-programming-breakpoint	ARMSIM simulator	I ME EST	15.03. 2021
6		Types of faults	Flipped classroom	III EEE B	25.01. 2021

Dr. D. Fathema Farzana	Types of grounding	Mind mapping	III EEE B	29.01. 2021
	Operating principles of relays	Animation	III EEE B	11.02. 2021
	Distance relays	Mind mapping	III EEE B	19.02. 2021
	Protection of transformer	Flash cards	III EEE B	12.03. 2021
	Protection of busbars	Quiz	III EEE B	25.03. 2021
	Comparators	Flipped classroom	III EEE B	01.04. 2021
	Numerical protection	Quiz	III EEE B	22.04. 2021
	Operation of circuit breaker	Animation	III EEE B	04.05. 2021
	Circuit breakers	Collaborative learning	III EEE B	06.05. 2021
	Static and dynamic characteristics	Flash Cards	II EEE A	22.01. 2021
	Errors in measurements	Flipped Classroom	II EEE A	29.01. 2021
	Single & three phase energy meter	Quiz	II EEE A	16.02. 2021
	Instrument transformers	Animation	II EEE A	02.03. 2021
	A.C Bridges	Mind Mapping	II EEE A	19.03. 2021
	Electrostatic and electromagnetic Interference	Quiz	II EEE A	24.03. 2021
	Magnetic Tape recorder	Animation	II EEE A	31.03. 2021
	CRO	Collaborative learning	II EEE A	16.04. 2021
	Transducer	Mind Mapping	II EEE A	04.05. 2021



		Thermal Imagers	Flipped Classroom	II EEE A	19.05. 2021
7	Mrs. N. Priya	Inductance and energy	Flash card	II EEE A	27.01.2021
		Statically and Dynamically induced EMF	Mind mapping	II EEE A	29.01.2021
		Phasor diagrams	Flash card	II EEE A	19.02.2021
		Three phase transformer connections	NPTEL video	II EEE A	02.03.2021
		Force and torque equations	Mind mapping	II EEE A	12.03.2021
		Singly and multiply excited systems	NPTEL video	II EEE A	18.03.2021
		Types of DC Machines	Mind Mapping	II EEE A	07.04.2021
		Characteristics of DC Machines	Flash card	II EEE A	09.04.2021
		Machine health Monitoring	Mind Mapping	II EEE A	28.04.2021
		Optimization technique	Mind Mapping	II EEE A	11.05.2021
		Introduction to Embedded Systems	NPTEL Video	III EEE A	20.01.2021
		Timer and Counting devices, Watchdog Timer, Real time clock	NPTEL Video	III EEE A	01.02.2021
		Serial Bus communication protocols- RS232 standard – RS422 – RS 485	NPTEL Video	III EEE A	12.02.2021
		Serial Peripheral Interface (SPI) – Inter Integrated Circuits (I2C)	NPTEL Video	III EEE A	19.02.2021
		Different phases of EDLC	Flow chart	III EEE A	10.03.2021

		Modelling of EDLC	Mind Mapping	III EEE A	11.03.2021
		Preemptive and non preemptive scheduling	Mind Mapping	III EEE A	01.04.2021
		Inter process communication	NPTEL Video	III EEE A	19.04.2021
		Washing machine	Flash card	III EEE A	29.04.2021
		Digital camera, ATM machine, Smart card	animation	III EEE A	07.05.2021
8	Dr. K. V. Thilagar	Inductance and energy	Flash card	II EEE B	29.01.2021
		Statically and Dynamically induced EMF	Animation	II EEE B	01.02.2021
		Phasor diagrams	Flash card	II EEE B	18.02.2021
		Three phase transformer connections	NPTEL video	II EEE B	26.02.2021
		Force and torque equations	Mind mapping	II EEE B	11.03.2021
		Singly and multiply excited systems	NPTEL video	II EEE B	18.03.2021
		Types of DC Machines	Mind Mapping	II EEE B	05.04.2021
		Characteristics of DC Machines	Flash card	II EEE B	09.04.2021
		Machine health Monitoring	Mind Mapping	II EEE B	27.04.2021
		Optimization technique	Mind Mapping	II EEE B	14.05.2021
		Tracking scenario	NPTEL video	I ME EST	11.01.2021
		S-MAC protocol	animation	I ME EST	22.01.2021
		Geographic routing	NPTEL video	I ME EST	01.02.2021

		localization	NPTEL video	I ME EST	09.02.2021
		Data centric storage	NPTEL video	I ME EST	24.02.2021
9	Mrs. J. Lydia	Examples of IPR	Real word learning	III EEE A	08.02.2021
		IPR in India and Abroad	Mind mapping	III EEE A	27.01.2021
		Patents	NPTEL lecture	III EEE A	15.02. 2021
		Trade Secrets	Mindmapping	III EEE A	03.03. 2021
		Patent Act of India	Mindmapping	III EEE A	25.03. 2021
		Geographical Indication Act	Flash cards	III EEE A	01.04. 2021
		Unfair Competition and IP Laws	Flipped class	III EEE A	19.04. 2021
		Case Studies on digital products	Nptel	III EEE A	22.04. 2021
		Enforcement Measures	Nptel	III EEE A	29.04. 2021
		Emerging issues	Brainstorming session	III EEE A	03.05. 2021
		Kirchoff's laws	Chart	I EEE	12.04. 2021
		Mesh and nodal analysis	Mind mapping	I EEE	15.04. 2021
		Circuit theorems	Mind mapping	I EEE	27.04. 2021
		Circuit theorems	Mind mapping	I EEE	30.04. 2021
		Resonance	Animation	I EEE	10.05.2021
		Self and mutual inductance	Animation	I EEE	20.05. 2021

		Transient Analysis	Flash card	I EEE	01.06. 2021
		Transient Analysis	Flipped class	I EEE	13.06. 2021
		Three phase circuits	Quiz	I EEE	05.07. 2021
		Star connected loads	NPTEL	I EEE	28.06. 2021
10	Mrs. K. A. Indu Sailaja	Classification of signals, Classification systems	Mind mapping	II EEE A	01.02.2021
		Signals and systems	Quiz	II EEE A	08.02.2021
		Laplace Transforms –properties	Flash cards	II EEE A	18.02.2021
		Convolution	Flow chart	II EEE A	23.02.2021
		The Discrete- Time Fourier Transform (DTFT) -properties	Flipped class	II EEE A	09.03.2021
		Linear and Circular Convolution	Flash cards	II EEE A	15.03.2021
		Different methods of finding Inverse Z-Transform	Flash cards	II EEE A	26.03.2021
		Z Transform and properties	Brainstorming session	II EEE A	29.03.2021
		Sampling	Teaching with case studies	II EEE A	08.04.2021
		Applications	group presentation	II EEE A	30.04.2021
		Classification of signals, Classification systems	Mind mapping	II EEE B	01.02.2021
		Signals and systems	Quiz	II EEE B	04.02.2021
		Laplace Transforms –properties	Flash cards	II EEE B	17.02.2021
		Convolution	Flow chart	II EEE B	22.02.2021

		The Discrete- Time Fourier Transform (DTFT) -properties	Flipped class	II EEE B	08.03.2021
		Linear and Circular Convolution	Flash cards	II EEE B	12.03.2021
		Different methods of finding Inverse Z-Transform	Flash cards	II EEE B	29.03.2021
		Z Transform and properties	Brainstorming session	II EEE B	31.03.2021
		Sampling	Teaching with case studies	II EEE B	05.04.2021
		Applications	group presentation	II EEE B	30.04.2021
11	Mr.P.Pushpakarthik	Stepper Motor	Animation	III EEE B	21.01.2021
		Microprocessor based control of Stepper Motor	Animation	III EEE B	02.02.2021
		Switched Reluctance motor	Animation	III EEE B	02.02.2021
		PMBLDC Motor	Animation	III EEE B	16.02.2021
		PMSM Motor	Mind Mapping	III EEE B	22.03.2021
		Other special machines	Technical Quiz	III EEE B	27.04.2021
		Stepper motor, PMBLDC, PMSM	Technical Quiz	III EEE B	07.05.2021
		PMBLDC Motor	Technical Quiz	III EEE B	19.05.2021
		PMSM Motor	Technical Quiz	III EEE B	03.05.2021
		Characteristics of SRM, PMBLDC, PMSM	Mind Mapping	III EEE B	25.03.2021
		EV technologies	Case Study	I ME EST	07.01.2021
		EV Types	NPTEL	I ME EST	11.01.2021

		Hybrid Electric Vehicles	Animation	I ME EST	12.01.2021
		Aerodynamic car	Animation	I ME EST	20.01.2021
		External combustion engine	Animation	I ME EST	09.02.2021
		Control of synchronous motor drives	Simulation	I ME EST	25.02.2021
		Traction batteries	case study	I ME EST	16.03.2021
		Alkaline batteries	case study	I ME EST	31.03.2021
		Fuel Cell	case study	I ME EST	29.03.2021
		Fuel Cell	Case study with NPTEL	I ME EST	25.03.2021
12	Mr. T. Kesavan	Indian Patent	Flash cards	III EEE B	9.2.2021
		Trade Secrets	Mindmapping	III EEE B	16.02.2021
		Geographical Indication Act	Mindmapping	III EEE B	3.03.2021
		Examples of IPR	Real word learning	III EEE B	8.03.2021
		IPR in Abroad	Mind mapping	III EEE B	17.03.2021
		Patent Act of India	Flash cards	III EEE B	4.04.2021
		Case Studies on Patent Infringement in USA	Case study	III EEE B	16.04.2021
		Case Studies on Patent Infringement in India	Case study	III EEE B	25.04.2021
		Emerging issues	Flipped classroom	III EEE B	04.05.21
		Unfair Competition	Flipped classroom	III EEE B	06.05.21

		Kohavi Algorithm	Mind mapping	I ME EST	10.02.2021
		Practical PLA's	Flash Card	I ME EST	22.02.2021
		Built-in Self-Test	Mind mapping	I ME EST	02.03.2021
		Sequential Circuit with Programmable Array Logic	Mind mapping	I ME EST	16.03.2021
		Xilinx FPGA	Flash Card	I ME EST	22.03.2021
		VHDL for Combinational Circuits	Online simulator	I ME EST	03.04.2021
		VHDL Code for Flip Flops	Online simulator	I ME EST	11.04.2021
		Function blocks, I/O blocks and Interconnects	Animation	I ME EST	23.04.2021
		Programmable Electrically Erasable Logic	Animation	I ME EST	03.05.2021
		VHDL Code for Serial Adder	Online simulator	I ME EST	06.05.2021
13	Mr. G. Vignesh	Photometry	Animation	IV EEE A&B	12.01.2021
		Energy Saving Lamps	Flipped Classroom	IV EEE A&B	19.01.2021
		Airconditioning	Animation	IV EEE A&B	21.01.2021
		BEEE Efficiency Ratings	Discussion Class	IV EEE A&B	27.01.2021
		Resistance Welding	Working Videos	IV EEE A&B	03.02.2021
		Mechanics of Train Movement	Jam Board	IV EEE A&B	09.02.2021
		Electric Traction - Train Movement	Quiz	IV EEE A&B	11.02.2021
		Online and Offline UPS	Case study	IV EEE A&B	17.02.2021

		Introduction to Embedded System	Mind mapping	III EEE A	20.01.2021
		In-circuit Emulator	Flipped class	III EEE A	03.02.2021
		RS422, RS485 communication protocols	Fipped Class	III EEE A	11.02.2021
		SPI and I2C Communication	Working Models	III EEE A	18.02.2021
		Phases of EDLC	Flow Diagram	III EEE A	04.03.2021
		Modelling of EDLC	Discussion Session	III EEE A	08.03.2021
		Scheduling Techniques	Flipped class	III EEE A	20.03.2021
		Washing machine	Flash card	III EEE A	29.04.2021
14.	Ms. B. Ponkarthika	Types of faults	Flipped classroom	III EEE A	25.01. 2021
		Types of grounding	Mind mapping	III EEE A	29.01. 2021
		Operating principles of relays	Animation	III EEE A	11.02. 2021
		Distance relays	Mind mapping	III EEE A	19.02. 2021
		Protection of transformer	Flash cards	III EEE A	12.03. 2021
		Protection of busbars	Quiz	III EEE A	25.03. 2021
		Comparators	Flipped classroom	III EEE A	01.04. 2021
		Numerical protection	Quiz	III EEE A	22.04. 2021
		Operation of circuit breaker	Animation	III EEE A	04.05. 2021
		Circuit breakers	Collaborative learning	III EEE A	06.05. 2021



		Determination of inductance & capacitance	Simulation	II EEE B	10.02.2021
		inductance of single phase & three phase circuit	Flash cards	II EEE B	04.02.2021
		Capacitance of single phase & three phase circuit	Flash cards	II EEE B	05.02.2021
		Formation of Corona	Flipped Classroom	II EEE B	02.03.2021
		Types of insulators	Collaborative learning	II EEE B	17.03.2021
		Construction of cables	Animation	II EEE B	07.04.2021
		Underground cables	Quiz	II EEE B	20.04.2021
		Distribution system	Mind mapping	II EEE B	28.04.2021
		Methods of voltage control	Brainstorming	II EEE B	06.05.2021
		Facts Devices	Animation	II EEE B	18.05.2021

**Academic Year: 2019-20**  
**Pedagogical Initiatives for Effective Teaching**  
**Odd Semester**

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Topic</b>	<b>Methodology used</b>	<b>Target Audiencs</b>	<b>Date</b>
1	Dr.E.Kaliappan Ph.D	Principles Of Management - SWAT Analysis	Case Study	IV B Sec	23.7.19 2.7.19
		Budget Preparation	Writing Proposal	IV B Sec	22.8.19
2	Dr.K.Mala Ph.D	Insulator Testing	Videos	IV A & B	4.10.19
		Impulse Voltage Measurement	Quiz	IV A & B	19.9.19
		Nanomaterial Classification	Flip Class	IV A & B	23.7.2019,2.7.2019

		Nanoquiz 1, Nanoquiz 2	Objective Question	IV A & B	22.8.2019,22.9.2019,25.7.2019,23.9.2019
		Nanosensor	NPTEL	IV A & B	19.9.2019 & 23.9.2019
		Digital Logic Circuits-Flip Flops	Objective Question	II A & B	11.10.2019
		Synchronous Sequential Circuits	Videos	II A & B	14.10.2019
		Asynchronous Sequential Circuits,Test Bench, Plds	Videos	II A & B	14.10.2019
5	Dr.J.Gowri shankar Ph.D	Magneto Hydro Thermal Power Generation	Animation	III Mech A& B	25.09.2019
		Wind Energy Power Generation	Animation Videos	III Mech A& B	28.08.2019
6	Dr.D.Fathema Farzana Ph.D	Construction Of Transformer, DC Machine	Demonstration, Animation	II A & B	13.07.2019,26.08.2019,28.8.2019
		OC And SC Test Of Transformer	Concept Mapping	II A & B	17.7.2019
		Principle Of Operation Of DC Generator	Animation	II A & B	26.8.2019, 28.8.2019
		DC Machines	Aptitude Test	II A & B	9.10.2019,4.10.2019
7	Mr. K.V. Thilagar M.E (Ph.D)	2 Pulse Converter	Simulation	III A&B	1/7/19
		Light Dimmer	Youtube Video	III A&B	29/7/19
		3 Phase Ac Voltage Controller	Simulation	III A&B	23/9/19
8	Mrs. D.Chandrakala M.E	Electronic Devices And Circuits	Mind Mapping	II A & B	9.10.19 & 10.10.19
		Power Amplifiers	Self Learning Class	II A & B	4.10.19
		Transistors	Quiz	II A & B	

9	Mrs.J.Lydia	Electromagnetic Waves	Videos & PPT's	II A & B	3.9.19,19.9.19 14.9.19, 25.9.19
		Electric Field And Magnetic Field	Quiz,Chart	II A & B	3.10.19
		Coordinate Systems	Chart	II A & B	26.6.19,27.6.19
10	Mrs.K.A.Indu Sailaja	Signals And Systems	Quiz	III A & B	03.09.19 &04.09.2019
		DSP Processors	Technical Talk By Students	III A & B	3.10.19
		Windowing Techniques	Flash Cards	III A & B	25.09.2019
11	Mr. P.Pushpakarthick M.E	Switched Reluctance Motor	Animated Videos	IV A	09.09.2019
		Stepper Motor	Animated Videos	IV A	24.07.2019
		Types Of Special Machines	Chart	IV A & B	10.10.2019
12	Mr.V.Vijeesh	Single Line Diagram, PU Quantities	Flashcard	III A & B	26/6/19
		Unsymmetrical Faults In Power System	Flashcard	III A & B	26/8/19
		Classification Of Power System Stability	Mind mapping	III A & B	18/9/19
13	Ms. Ponkarthika B	Layout Of Thermal Power Plant	Animated Videos	II A & B	25/6/19
		Nuclear Power Plant	Quiz	II A & B	21/8/19 & 26/8/19
		Solar Photovoltaic Cell	Working Model	II A & B	24/9/19
14	Mr. G.Vignesh M.E	8085 Architecture	Animated Videos	III A & B	24/6/2019, 25/6/2019
		8085 Programming	Simulation Open Source Software	III A & B	12/7/2019, 16/7/2019
		8051 Applications	Working Model	III A & B	1/10/2019,25/9/2019

15	Mr. Vijayakumar	MRI	Animated Videos	IV EEE A	26.06.19
		Pulse Oximetry	Working Model	IV EEE A	24/09/19
16	Mr.G.V.Chidambarathanu	Fault Current Calculation Using Symmetrical Components, Fundamental Of Sequence Components, Formation Of Sequence Network Of A Power System- Unsymmetrical Fault Analysis	Flipped Class	IV EEE A & B	26.06.19, 27.06.19 & 25.06.19, 26.06.19
		Circuit Breaker	Aptitude Test	IV EEE A & B	11.10.19 & 20.09.19
17	Mrs.N.Priya	Speed Control Of DC Drives	NPTEL Video	II Mech. A	22.08.19
		Working Principle Of Star Delta Starter	Animated Video	II Mech. A	10.08.19
		Speed Control Of Three Phase Induction Motor(Working)	Animated Video	II Mech. A	19.09.19
18	Mr.M.Venkatachalam	Principles Of Management - Management TPS (Think Pair Share)	Materials Shared With In Group Members And Documented	IV EEE A	05.08.19
		Principles Of Management - Communication	CASE STUDY	IV EEE A	12.9.19
19	Mrs.K.Shanthi	Working Of DC And AC Motors	Animated Video	II MECH C	07.08.19
		3D Operation Of 3 Point And 4 Point Starters	3D Video	II MECH C	13.09.19
		Speed Control Of DC Drives	NPTEL Video	II MECH C	12.10.19
20	Mrs. C.Priya	Working Principle Of Star Delta Starter	Animated Video	II MECH B	10.08.19
		Speed Control Of Three Phase Induction Motor(Working)	Animated Video	II MECH B	13.09.19

		Scherbius System(Working Model)	Model Explanation Video	II MECH B	20.09.19
21	Mrs. D.Suganya	Cell And Its Properties	NPTTEL Video	IV B	25.06.2019
		Respiration System	Animated Video	IV B	27.06.2019
		Bio Quiz	Objective Questions	IV B	23.08.2019

### Even Semester

<u>S. No</u>	Faculty Name	Topic	Methodology Used	Target Audience	Date
1	Dr.E.Kaliappan	Signal flow graph	Mind Mapping	II EEE B	09.01.2020
		P,PI,PID Controller	Flash card	II B	28.01.2020
		Frequency response	Quiz	II EEE B	07.02.2020
		Lag.lead & lag-lead compensator	Concept mapping	II EEE B	11.03.2020
		Time response & stability analysis	Simulation Matlab	II EEE B	22.03.2020
2	Dr. K. Mala	Voltage, Current, Power	Mind Mapping	I EEE A	08.01.2020
		Reciprocity Theorem	Quiz	I EEE A	30.01.2020
		Mutual Inductance	Brain storming	I EEE A	14.02.2020
		Transient response of RL, RC circuits	Simulation	I EEE A	06.03.2020
		Three phase AC circuits	Video	I EEE A	06.04.2020
3	Dr. R. Karpagam	Calculation of voltage regulation using EMF, MMF	Flash Card	II EEE A	02.01.2020
		Calculation of voltage regulation using ZPF, ASA	Flash Card	II EEE A	07.01.2020

	Working of Synchronous motor	Animation	II EEE A	13.01.2020
	Power developed by synchronous motor	Flash Card	II EEE A	23.01.2020
	No load and blocked rotor test on three phase induction motor	Flow chart	II EEE A	17.02.2020
	Induction generator and synchronous induction motor	Animation	II EEE A	20.02.2020
	Slip Power Recovery Scheme	NPTEL Video	II EEE A	16.03.2020
	Braking of induction motor	NPTEL Video	II EEE A	17.03.2020
	Magnetic Levitations	Animation	II EEE A	02.04.2020
	Special Machines and Applications	Quiz	II EEE A	01.04.2020
	Electrical Drives	Flipped class	III EEE B	16.12.2019
	Selection of motor	Teaching with case studies	III EEE B	09.01.2020
	4 quadrant operation of chopper fed DC drives	Flash cards	III EEE B	23.01.2020
	Converter	Mind mapping	III EEE B	13.01.2020
	Static Scherbius Drive	Flipped class	III EEE B	06.02.2020
	Field weakening mode	Flash cards	III EEE B	07.02.2020
	Permanent magnet synchronous motor	Brainstorming session	III EEE B	24.02.2020
	Transfer function for dc motor	Flipped class	III EEE B	04.03.2020
	Speed and current contoller	Flipped class	III EEE B	12.03.2020

4	Dr. P. Marish Kumar	Signal flow graph	Mind Mapping	II EEE A	07.01.2020
		P,PI,PID Controller	Flash card	II EEE A	10.02.2020
		Frequency response	Quiz	II EEE A	26.02.2020
		Lag.lead & lag-lead compensator	Concept mapping	II EEE A	11.03.2020
		Time response & stability analysis	Simulation Matlab	II EEE A	22.03.2020
		Electrical Drives	Flipped class	III EEE B	16.12. 2019
		Selection of motor	Teaching with case studies	III EEE B	09.01.2020
		4 quadrant operation of chopper fed DC drives	Flash cards	III EEE B	23.01.2020
		Converter	Mind mapping	III EEE B	13.01.2020
		Static Scherbius Drive	Flipped class	III EEE B	06.02.2020
		Field weakening mode	Flash cards	III EEE B	07.02.2020
		Permanent magnet synchronous motor	Brainstorming session	III EEE B	24.02.2020
		Transfer function for dc motor	Flipped class	III EEE B	04.03.2020
		Speed and current contoller	Flipped class	III EEE B	12.03.2020
5	Mrs. D. Chandrakala	Do's and Dont's of different types of disasters	Mind Mapping	IV EEE A	19.12.2019
		Earth Quake, Land slide and Flood	Quiz	IV EEE A	19.12.2019

		PRI, Urban Local Bodies	Mind Mapping	IV EEE A	02.01.2020
		Early Warning System	Flash Card	IV EEE A	07.01.2020
		Climate Change Adaptation	Mind Mapping	IV EEE A	09.01.2020
		Impacts of Development projects on Dams	Quiz	IV EEE A	08.01.2020
		Components of water relief: Water and Food	Flash Card	IV EEE A	11.01.2020
		Institutional Arrangements	Mind Mapping	IV EEE A	13.01.2020
		Electrical Drives	Flipped class	IV EEE A	16.12.2019
		Selection of motor	Teaching with case studies	III EEE B	09.01.2020
		4 quadrant operation of chopper fed DC drives	Flash cards	III EEE B	23.01.2020
		Converter	Mind mapping	III EEE B	13.01.2020
		Static Scherbius Drive	Flipped class	III EEE B	06.02.2020
		Field weakening mode	Flash cards	III EEE B	07.02.2020
		Permanent magnet synchronous motor	Brainstorming session	III EEE B	24.02.2020
		Transfer function for dc motor	Flipped class	III EEE B	04.03.2020
6	Dr. D. Fathema Farzana	Types of faults	Flipped classroom	III EEE B	18.12.2019
		Types of grounding	Mind mapping	III EEE B	19.12.2019



		Distance relays	Mind mapping	III EEE B	20.01.2020
		Protection of transformer	Flash cards	III EEE B	29.01.2020
		Protection of busbars	Quiz	III EEE B	05.02.2020
		Types of faults	Flipped classroom	III EEE B	10.02.2020
		Static and dynamic characteristics	Mind mapping	II EEE A	18.12.2019
		Standards	Flipped classroom	II EEE A	08.01.2020
		Single & three phase energy meter	Quiz	II EEE A	25.01.2020
		Instrument transformer	Concept mapping	II EEE A	05.02.2020
		AC Bridges	Think pair and share	II EEE A	12.02.2020
7	Mrs. N. Priya	Calculation of voltage regulation using EMF, MMF	Flash Card	II EEE A	02.01.2020
		Calculation of voltage regulation using ZPF, ASA	Flash Card	II EEE A	07.01.2020
		Working of Synchronous motor	Quiz	II EEE A	13.01.2020
		Power developed by synchronous motor	Flash Card	II EEE A	23.01.2020
		No load and blocked rotor test on three phase induction motor	Flow chart	II EEE A	17.02.2020
		Induction generator and synchronous induction motor	Quiz	II EEE A	20.02.2020
		Slip Power Recovery Scheme	Mind mapping	II EEE A	16.03.2020
		Braking of induction motor	Chart	II EEE A	17.03.2020

		Magnetic Levitations	Chart	II EEE A	02.04.2020
		Special Machines and Applications	Quiz	II EEE A	01.04.2020
		Kirchhoff's Laws-	Chart Demonstration	I CSE A	22.01.2020
		Formulas in Electric Circuits	Quiz	I CSE A	10.01.2020
		MC instruments	Mind Mapping	I CSE A	24.01.2020
		MI instruments	Mind Mapping	I CSE A	25.01.2020
		DC Generators	Flash Card	I CSE A	08.02.2020
		DC Motors	Mind Mapping	I CSE A	26.02.2020
		Transistor types	Chart	I CSE A	11.03.2020
		Hazards of Electricity	Picture Demonstration	I CSE A	19.03.2020
8	Mr. K. V. Thilagar	Choice of Electric Motor	Brain storming	IV EEE A	16.12.2019
		Electric Braking	Mind Mapping	IV EEE A	18.12.2019
		Track Equipment	Group Presentation	IV EEE A	19.12.2019
		Classification of Light sources	Flash cards	IV EEE A	20.12.2019
		Energy Saving Lamps	Group Discussion	IV EEE A	6.1.2020
		Introduction to Heating Classification	Mind Mapping	IV EEE A	7.1.2020
		Electric Welding	Brain storming	IV EEE A	9.1.2020
		Solar Energy	Quiz	IV EEE A	10.1.2020
		synchronous rectifiers	quiz	III EEE A&B	10.1.2020
		cascaded MLI	Debate	III EEE A&B	30.1.2020

		modulation schemes for MLI	Animation	III EEE A&B	5.2.2020
		AC-AC Converter without resonant link	Animation	III EEE A&B	15.2.2020
		AC-DC converter	Animation	III EEE A&B	25.2.2020
		Resonant converter	NPTTEL	III EEE A&B	10.3.2020
9	Mrs. J. Lydia	Kirchhoff's Laws	Chart	I EEE B	8.1.2020
		Circuit Theorems	Mind Mapping	I EEE B	23.1.2020
		Resonance	Quiz	I EEE B	5.2.2020
		Transient Analysis	Flash Card	I EEE B	9.3.2020
		Three Phase Circuits	Quiz	I EEE B	19.3.2020
		Kirchhoff's Laws	Chart Demonstration	I CSE C	20.1.2020
		Formulas in Electric Circuits	Chart	I CSE C	20.1.2020
		DC Machines	chart	I CSE C	13.2.2020
		MI,MC instruments	Mind Mapping	I CSE C	27.1.2020
		Transistor types	Chart	I CSE C	5.3.2020
		Hazards of Electricity	Picture Demonstration	I CSE C	23.3.2020
10	Mrs. K. A. Indu Sailaja	Introduction to Embedded Systems	Brainstorming session	III EEE A	19.12.2019
		Timer and Counting devices, Watchdog Timer, Real time clock	Quiz	III EEE A	19.12.2019
		Serial Bus communication protocols- RS232 standard – RS422 – RS 485	Flash cards	III EEE A	02.01.2020

		Serial Peripheral Interface (SPI) – Inter Integrated Circuits (I2C)	Flash cards	III EEE A	07.01.2020
		Different phases of EDLC	Flow chart	III EEE A	09.01.2020
		Modelling of EDLC	Mind mapping	III EEE A	08.01.2020
		Preemptive and non preemptive scheduling	Role play	III EEE A	11.01.2020
		Inter process communication	mind mapping	III EEE A	13.01.2020
		Washing machine	Teaching with case studies	III EEE A	14.2.2020
		Digital camera, ATM machine, Smart card	group presentation	III EEE A	20.02.2020
		Signal propagation	Brainstorming session	I ME.EST	23.01.2020
		Handover - GSM	Teaching with case studies.	I ME.EST	20.02.2020
		IEEE 802.11	Conducting Quiz in class	I ME.EST	27.02.2020
		Ad-Hoc Networks	Mind mapping	I ME.EST	24.04.2020
		WWW Programming Model	Tech Talk by students.	I ME.EST	27.04.2020
11	Mr.P.Pushpakarthick	Fire safety	mind mapping	I civil	27.02.2020
		Power circuit devices	chart model	I civil	13.02.2020
		Rectifiers and Semiconductor devices	Quiz	I civil	09.03.2020
12	Mr. G. Vignesh	Choice of Electric Motor	Brain storming	IV EEE B	16.12.2019
		Electric Braking	Mind Mapping	IV EEE B	18.12.2019
		Track Equipment	Group Presentation	IV EEE B	19.12.2019
		Classification of Light sources	Flash cards	IV EEE B	20.12.2019
		Energy Saving Lamps	Group Discussion	IV EEE B	03.01.2020

		Introduction to Heating Classification	Mind Mapping	IV EEE B	07.01.2020
		Electric Welding	Brain storming	IV EEE B	10.01.2020
		Solar Energy	Quiz	IV EEE B	11.01.2020
		Process Synchronization Semaphores	Mind Mapping	I - EST	03.02.2020
		Basic Linux Commands	Model Based	I - EST	10.02.2020
13	Ms. B. Ponkarthika	Features & applications of stepper motor	Quiz	III EEE A & B	17.12.2019
		Power controllers of SRM	Flash card	III EEE A & B	21.01.2020
		Characteristics of PMLDLC	Simulation	III EEE A & B	05.02.2020
		Characteristics of PMBDCM,SRM,PMSM	Mind mapping	III EEE A & B	15.02.2020
		Other special electrical machines	Mind mapping	III EEE A & B	10.03.2020
		Single & double circuit for transmission lines	Flash card	II EEE A & B	03.01.2020
		Determination of inductance & capacitance	Simulation	II EEE A & B	10.01.2020
		Types of insulators	Flipped classroom	II EEE A & B	11.02.2020
		Types of underground cables	Mind mapping	II EEE A & B	20.02.2020
		Distribution systems	Real time SRLDC webpage	II EEE A & B	18.03.2020

**Academic Year: 2018-19**  
**Pedagogical Initiatives for Effective Teaching**  
**Odd Semester**

<b>S.no</b>	<b>Name of the Faculty</b>	<b>Topic</b>	<b>Methodology Used</b>	<b>Target Audiences</b>	<b>Date</b>
1	Dr.E.KALIAPPAN Ph.D	Block diagram reduction techniques	Flash cards	III yr A sec	13/7/18
		Unit- 1 & 2	Quiz	III yr A sec	3/8/18
		Time response, Root locus, Bode plot and Nyquist Plot	Simulation study using MATLAB	III yr A sec	11/9/18
2	Dr.K.MALA Ph.D	Speed control of steam turbine	Model	III year A & B	13/07/2018
3	Dr.R.KARPAGAM Ph.D	Classification of nano materials	Flip class	IV A and B	14/7/2018
		Basics concepts on nano materials	Quiz	IV A and B	29/8/2018
		Working animation of targeted drug delivery system	Animated videos	IV A and B	
4	Dr.. M.DEVA BRINDA	Causes of over voltages	Quiz	IV A and B	13/7/2018
		Voltage multiplier circuits and voltage doubler circuits	Quiz	IV A and B	26/7/2018, 27/7/2018
		Insulation Coordination	Quiz	IV A and B	3/9/2018
5	Mr. P. MARISHKUMAR M.Tech (Ph.D)	Classification of DC Motors	Flash cards	II year Mech A and B	13.7.18
		Characteristics of DC Motor	Flash cards	II year Mech A and B	16.8.18
6	Mrs. D.CHANDRAKALA M.E	Transformers, DC machine	Quiz	II A and B	3.8.18 & 2.8.18, 5.9.18 & 28.8.18
		Transformer	Demonstration at lab	II A and B	20.7.18 & 25.7.18
		DC machine starters	Demonstration at lab	II A and B	31.8.18 & 5.9.18, 17.9.18 & 18.9.18
7	Mr. K.V. THILAGAR M.E (Ph.D)	IGBT construction and working	model based	III EEE A & B	11.07.2018

		Power Factor Controller	Simulation	III EEE A & B	19.07.2018
8	Mrs. J. LYDIA M.E	Coordinate systems	Charts	II EEE-A-57, II EEE-B-58	11.7.18, 30.7.18&
		Formulas in electric field and magnetic field	Flash cards	II EEE-A-57, II EEE-B-58	16.8.18
9	Mrs. K.A. INDU SAILAJA M.E	Block diagrams of 8259,8251,8279,8237	Flash cards	III year A & B	15.09.2018
		Instruction set of 8051 microcontroller	Quiz	III year A & B	24.09.2018
		Programming of 8085 & 8051	simulation using open source software	III year A & B	1.10.2018
10	Mr. P.PUSHPAKARTHICK M.E	Rectifiers	chart based model	II YEAR A& B	18/07/2018
		Amplifiers	NPTEL VIDEOS	II YEAR A& B	4/09/2018
11	Mr. V.VIJEESH M.E	Outline about power system analysis	Mind Mapping	III EEE A & B	02.07.2018
		Power Flow Analysis	NPTEL videos	III EEE A & B	19.07.2018
		Formulas for fault Analysis	Flashcard	III EEE A & B	31.08.2018
12	Ms. B. PONKARTHIKA M.E	Load dispatch problems	Problem data took from Southern Region Load Dispatch Centre report	II EEE-A-57, II EEE-B-58	20/9/18 & 25/9/18
		Supercritical boilers	Animated videos	II EEE-A-57, II EEE-B-58	4/7/18 & 6/7/18
		Energy scenario	Mind Mapping	II EEE-A-57, II EEE-B-58	2/7/18 & 3/7/18
13	Mr. G.VIGNESH M.E	Measurement of Blood Pressure	Model Based	IV EEE A - 48	18/7/2018
		Measurement of Heart Rate and Sound	Animated videos	IV EEE A - 49	24/7/2018
		Blood PH analyser	Model Based	IV EEE A - 47	27/7/2018
14	Mrs.S.P.BABY SHYNELA M.E	Measurement of Blood Pressure	Model Based	IV EEE B	19/7/18
		Measurement of Heart Rate and Sound	Animated videos	IV EEE B	26/7/18
		Blood PH analyser	Model Based	IV EEE B	30/7/18
15	M.LAVANYA	Time response, Root locus, Bode plot and Nyquist Plot	Simulation study using MATLAB	III year B	18/09/2018

		Unit - 1 & 2	Online Test	III year B	11/08/2018
16	A.SIDDARTHAN	DC circuit breaker, MCCB	Model based study	IV year A & B	04/09/2018,05/09/2018
		Circuit breaker working	Animated video	IV year A & B	12/09/2018
17	S.VIJAYAKUMAR	working of counters and shift registers	animation through software	II A and B	18/09/2018
18	S.SUBASH CHANDRA BHARATHI	Working animation of synchronous machine	Animated videos	IV year A & B	18/7/2018,
		Working animation of stepper motor	Animated videos	IV year A & B	22/08/2018
		Working animation of switched reluctance motor	Animated videos	IV year A & B	06/09/2018
19	RAHUL	Three phase induction motor - working principle video	Animated videos	III year A	20/09/2018, 21/09/2018
		single phase induction motor - Construction & Working video	Animated videos	III year A	22/09/2018

**Academic Year: 2018-19**  
**Pedagogical Initiatives for Effective Teaching**  
**EVEN Semester**

<b>S.no</b>	<b>Name of the Faculty</b>	<b>Topic</b>	<b>Methodology Used</b>	<b>Target Audiences</b>	<b>Date</b>
1	Dr.E.KALIAPPAN Ph.D	Closed loop control of Electrical systems	Mini Project demo	2nd yr B sec	22.2.19
		water level indicator	Mini Project demo	2nd yr B sec	1.2.19
2	Dr.R.KARPAGAM Ph.D	Technical Quiz on Special Electrical machines	Written exam	II A & B	17/12/18
		Flash card	Flash card	II A & B	28/2/2019
3	Dr. M.DEVA BRINDA	DMM	Model-Demo	II A&II B	1.2.2019
4	Mr. P. MARISHKUMAR M.Tech (Ph.D)	DC MOTOR	MODEL-DEMO	III YEAR A & B	1.2.19
		SMPS	MODEL-DEMO	III YEAR A & B	22.2.19
5	Mrs. D.CHANDRAKALA M.E	Economic Dispatch	Quiz	III YEAR A & B	26/2/2019



6	Mr. K.V. THILAGAR M.E (Ph.D)	Grid connected PV system	Simulation	IV- B	26/2/19
		DC machine construction	Model	I year Mech- C	18/2/19
7	Mrs. J. LYDIA M.E	DC motor construction and operation	animation videos	I Mech A and B	20.2.19,21. 2.19
8	Mrs. K.A. INDU SAILAJA M.E	Applications of OPAMP	Quiz	II year EEE A & B	21.01.2019
		summer, inverting and non inverting ,	Demonstration	II year EEE A & B	25.02.2019
9	Mr. P.PUSHPAKARTHICK M.E	Electrical Wiring	MODEL	I YEAR AUTO	21.02.2019
10	Mr. V.VIJEESH M.E	Electrical engineering Materials	Mind mapping	III A & B	20/12/2018
		Design of Transformers- Formulas	Flashcard	III A & B	2-2-2019
11	Ms. B. PONKARTHIKA M.E	Power system - generation , transmission and distribution in tamilnadu	Explained with Real time SRLDC report	II A & B	18/12/18
		Types of Insulator	PPT	II A & B	4-2-19
		AC & DC distribution	NPTEL Video	II A & B	27/2/19
12	Mr. G.VIGNESH M.E	Travelling Waves	Animation	III A & B	13/02/19
13	M.LAVANYA	Time response, frequency analysis using MATLAB	Simulation	II A	8-2-19
		Renewable sources of Energy systems	PPT	IV A	19/2/19
14	A.SIDDARTHAN	Renewable sources of Energy systems	PPT	IV B	20/2/2019
		Solar and Wind turbine working	Animation Video	IV B	27/2/2019
15	S.VIJAYAKUMAR	Introduction To Real Time Operating System	PPT	III A & B	13/02/19

Academic Year: 2017-18  
Pedagogical Initiatives for Effective Teaching  
**Odd Semester**

S.no	Name of the Faculty	Topic	Methodology used	Target Audiences	Date
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1.	B.Ponkarthika	Fabrication of IC Technology	Animated videos	II B	03.07.2017
		Characteristics & Applications of Op Amp.	Quiz	II B	09.08.2017
		555-Timer	Online Based simulation Study	II B	18.08.2017
2.	M.Devabrinda	Dielectric breakdown	Quiz	IV A&B	15.07.2017
		Lightning Surges	Quiz	IV A&B	10.08.2017
		AC and DC Voltage Generation and Measurements	Quiz	IV A&B	15.09.2017
3.	J Lydia	Electric Field and magnetic field	Quiz	II A&B	02.08.2017
		Coordinate Systems	Chart	II A&B	11.09.2017
4.	G.Vignesh	Architecture of 8085	Animation	III B	03.07.2017
5.	K.V.Thilagar	MOSFET operation	Animation	III B	17.07.2017
6.	Dr.R.Karpagam	Various operation of Inverters	Power Point Presentation	III A	15.07.2017
7.	P.Puspakarthick	BLDC and Synchronous Motor	Demo	IV A	07.08.2017
				11.09.2017	
8.	Dr.K.Mala	Z Bus Formulation	Chart	III A	17.07.2017
		Z Bus Formulation	Chart	III B	19.07.2017
9.	D.Chandrakala	Code Converter	Self-Learning Class	II A&B	02.08.2017
		Half and Full adders	Simulation	II A&B	05.10.2017
10.	M.Padmapriya	Fabrication of IC's	Animated Videos	II A	20.07.2017
11.	Indhusailaja	Various interfaces with 8085	Flashcard	III A	17.07.2017
		Block diagram of 8085	Chart, Video	III A	19.07.2017

#### Even Semester

S.no	Name of the Faculty	Topic	Methodology used	Target Audiences	Date
1.	Keerthana R	Standing Waves	Demo	III A	28.02.2018
2.	Vignesh G	Standing Waves	Demo	III A	09.03.2018
3.	B.Ponkarthika	Indicating Instruments	Model Based Teaching	I Civil B	01.02.2018
		DC Generator, Motor, Transformer	Animated video and Model	I Civil B	07.02.2018
		Rectifier	Working model	I Civil B	24.02.2018
4.	M.Devabrinda	Illumination	Quiz	IV A&B	22.12.2017
		Electric Traction	Quiz	IV A&B	22.01.2018

		Welding	Quiz	IV A&B	23.02.2018
5.	K.V.Thilagar	Slip Power Recovery Scheme	Model Based	III B	16.02.2018
6.	J.Lydia	DC Motor	Chart	I IT A&B	06.02.2018
		Induction Motor	Videos	I IT A&B	09.03.2018
7.	P.Puspakarthick	DC Machines	Model	I CSE A	06.02.2018
8.	P.Marishkumar	DC Generator, Model, Transfromer	Animated Videos	I Mech B	09.03.2018
		Solar, wind, tidal Power Plant	Animated Videos	IV B	28.02.2018
9.	S.P.BabyShynela	Circuit Theorem	Chart	I Mech A&C	19.02.2018
		DC Generator	Animated Video	I Mech A&C	12.03.2018
10.	Dr.K.Mala	Automatic load frequency Controller	Model	III A	08.01.2018
		Automatic load frequency Controller	Model	III B	03.01.2018
11.	D.Chandrakala	Transformer and DC Machines	Quiz	II A&B	27.01.2018
		Transformer and DC Machines	Demonstration class	II A& B	04.01.2018 20.02.2018
		Braking of Motor	Model	II A &B	12.03.2018 13.03.2018
12.	Indhusailaja	Modelling of ELDC	Model	III A&B	09.03.2018
		Prototype and spild model	Chart	III A& B	28.02.2018
13.	M.Padmapriya	Model of transmission systems	Model	II A&B	18.02.2018
14.	Vijeesh V	Electrical Engineering materials	Mind Mapping	III B	18.12.2017
		Transformer Core design	Flashcard	III B	12.02.2018

Academic Year: 2016-17  
Pedagogical Initiatives for Effective Teaching  
**Odd Semester**

Sl.No.	Subject Code/ Name of the Subject	Pedagogical Initiatives Adopted	Content	Outcome
1.	EE6301/Digital Logic Circuits	1. Animation Videos	1. Introduction to Counters	Students were able to understand the concept of counters
2.	EE6302/Electromagnetic Theory	1. Flash card	1. Coordinate systems	Clear idea about the Coordinate system were given
3.	EC6202/Electronic Devices and Circuits	1. Animation Videos	1. PN junction Diodes	Working of PN junction Diode was clearly understood by the students
4.	EE6303/Linear Integrated Circuits and Applications	1. Animated videos 2. Technical quiz	1. IC Fabrication Steps 2. Application of Operational Amplifier	Animation provides the clear picture of fabrication of IC
5.	EE6501/Power System Analysis	1. Chart based teaching	1. Building algorithm for Z Bus	Step by step procedure of bus building algorithm to calculate ZBus was clearly understood by the students
6.	EE6502/Microprocessors and Microcontrollers	1. Mind mapping	1. Microprocessor 8085 Overview	Clear overview of Microprocessor 8085 was given
7.	ME6701/Power Plant Engineering	1. Animation Videos	1. Thermal Power Plant 2. Nuclear Power Plant	Process involved in the thermal and nuclear power plant were clearly known to the students
8.	EE6503/Power Electronics	1. NPTEL	1. Power Electronics Devices	Overview of all power electronic devices were taught clearly
9.	EE6504/Electrical Machines - II	1. Flash Card 2. Mind Mapping 3. EDUSAT	1. Three Phase Induction Motor Construction 2. Single Phase Induction Motor 3. Construction of Synchronous Generator	Construction of Synchronous generator and three phase induction motor were taught clearly
10.	IC6501/Control Systems	1. Flashcard	1. Construction of Bode Plot	Procedure for drawing Bode plot was clearly taught
11.	EE6701/High Voltage Engineering	1. Mind mapping	1. Lightning phenomenon	Lightning phenomenon was explained in a clear way
12.	EE6702/Protection and Switchgear	1. Animation Videos	1. Working of Relay	Working of Relay operation was taught in a better which helps them in doing mini projects
13.	EE6703/Special Electrical Machines	1. Chart	1. Overview of Special Electrical Machines	All special electrical machines were taught clearly

14.	EI6704/Biomedical Instrumentation	I. Animated Videos	I. Cardio vascular system	Animation on cardio vascular system gave a better idea about human physiology
15.	GE6081/Fundamentals of Nanoscience	I. Mind mapping	I. Nanostructure materials	Types of Nano structural materials were understood by the students

**Even Semester**

Sl.No.	Subject Code/ Name of the Subject	Pedagogical Initiatives Adopted	Content	Outcome
1.	EE6201 Circuit Theory	1. Technical Quiz	1. Application of electrical theorems	Students were able to know day to day life application of all circuit theorems
2.	EE6401 Electrical Machines - I	1. NPTEL	1. Magnetic circuits	NPTEL Video gave a clear idea about magnetic circuits
3.	CS6456 Object Oriented Programming	1. Brainstorming	1. Constructors and Destructors	This session improved the thinking ability of the students on constructors and destructors
4.	EE6402 Transmission and Distribution	1. Z to A Approach	1. Derivation of Cable parameters	Cable parameters derivation was understood clearly by the students in step by step manner
5.	EE6403 Discrete Time Systems and Signal Processing	1. Animation video 2. Simulation	1. Sampling theorem 2. Filter design	This gave a clear picture about sampling theorem and design of filters
6.	EE6404 Measurements and Instrumentation	1. Model based teaching	1. Moving Coil and Moving Iron meters	Students were able to understand the inner parts of ammeter and voltmeters
7.	EC6651 Communication Engineering	1. Flashcard	1. Modulation Techniques	Clear picture of modulation techniques was given to the students
8.	EE6602 Embedded Systems	1. Technical Quiz	1. Recent Embedded processors and Control	Students were able to know about the recent trends in embedded processor and control
9.	EE6603 Power System Operation and Control	1. Simulation	1. Load frequency control using MATLAB simulink	Load frequency control of speed governing mechanism was taught through a simulated power system problem
10.	EE6604 Design of Electrical Machines	1. Real Time Videos 2. Model based teaching	1. Methods of transformer cooling 2. DC shunt motor	Students got the knowledge about the cooling mechanism in transformers
11.	EE6002 Power System Transients	1. Simulation 2. Animation Videos	1. Simulation studies using PSCAD 2. Formation of Lightning	Simulation studies helps the students to do their final year projects in power system field
12.	EE6801 Electric Energy Generation, Utilization and Conservation	1. Model Based Teaching	1. Solar PV Generation	Generation of power through solar had become familiar with the students which help them to do their projects in Solar power generation

13.	EE6009 Power Electronics for Renewable Energy Systems	1. Animation Videos	1. Solar Power Plant 2. Wind Power Plant	Process involved in the solar and wind power plant were clearly known to the students
14.	GE6075 Professional Ethics in Engineering	1. Power Point presentation	1. Case study on Chernobyl crisis	Students were able to know how to deal with a risk situation in an industry

Academic Year: 2015-16  
Pedagogical Initiatives for Effective Teaching

**Odd Semester**

Sl.No.	Subject Code/ Name of the Subject	Pedagogical Initiatives Adopted	Content	Outcome
16.	EE6301/Digital Logic Circuits	1. NPTEL	1. Design of synchronous sequential Circuits	Students were able to do mini projects based on the counters
17.	EE6302/Electromagnetic Theory	1. Technical Quiz	1. Electric and Magnetic field	Comparative study of both electric and magnetic field was understood by the students
18.	EC6202/Electronic Devices and Circuits	1. Animation Videos	1. PN Junction diode	A clear picture of working of PN junction diode was given
19.	EE6303/Linear Integrated Circuits and Applications	1. Animated videos 3. Technical quiz	1. IC Fabrication Steps 2. Application of Operational Amplifier	Step by step procedure of IC fabrication and Operational amplifier was thoroughly known by the students
20.	EE6501/Power System Analysis	1. NPTEL Videos	1. Load flow Analysis using Guass Siedal Method	Load flow analysis algorithm was clearly understood which helps the students to solve

				power flow analysis problems
21.	EE6502/Microprocessors and Microcontrollers	I. NPTEL Video	I. Peripheral Interfacing with Microprocessor 8085	Clear picture of peripheral inter facing was given which improves their programming skills
22.	EE6504/Electrical Machines - II	I. Flash Card 2. Mind Mapping	I. Three Phase Induction Motor Construction 2. Single Phase Induction Motor	Construction of AC machines were known which helps them while studying the course Design of Electrical Machines
23.	IC6501/Control Systems	I. Flashcard	I. Construction of Root locus	Step by step procedure for drawing root locus was clearly known by the students
24.	EE6701/High Voltage Engineering	I. Flashcard	I. Generation of High voltage	Various high voltage generation techniques were studied which helps them in doing projects on High Voltage testing.
25.	EE6703/Special Electrical Machines	I. Model based teaching	I. Synchronous reluctance Motor	Cut section of synchronous reluctance motor gave a clear view of special machines



### Even Semester

Sl.No.	Subject Code/ Name of the Subject	Pedagogical Initiatives Adopted	Content	Outcome
15.	EE6402 Transmission and Distribution	<ol style="list-style-type: none"> <li>1. Model based teaching</li> <li>2. Model based Teaching</li> </ol>	<ol style="list-style-type: none"> <li>1. Structure of Power System</li> <li>2. Types of cables</li> </ol>	Cut section of cables gave a clear idea about the layers of cables
16.	EE6603 Power System Operation and Control	<ol style="list-style-type: none"> <li>1. Technical quiz</li> </ol>	<ol style="list-style-type: none"> <li>1. Voltage control methods</li> </ol>	Various voltage control methods and its applications were clearly understood by the students
17.	EE6801 Electric Energy Generation, Utilization and Conservation	<ol style="list-style-type: none"> <li>1. Mind Mapping</li> </ol>	<ol style="list-style-type: none"> <li>1. Power Tariff</li> <li>2. Power Generation Plants</li> </ol>	Structure of power tariff in the real time system was known by the students

