

MARTHANDAM COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Course Outcomes – Odd Semester 2022-23

Sl. No.	Semester	Theory/ Practical	Course Code / Course Name
1)	3	Theory	MA3303 Probability and Complex Functions
2)	3	Theory	EE3301 Electromagnetic Theory
3)	3	Theory	EE3302 Digital Logic Circuits
4)	3	Theory	EC3301 Electron Devices and Circuits
5)	3	Theory	EE3303 Electrical Machines - I
6)	3	Theory	CS3353 C Programming and Data Structures
7)	3	Practical	EC3311 Electronic Devices and Circuits Laboratory
8)	3	Practical	EE3311 Electrical Machines Laboratory – I
9)	3	Practical	CS3362 C Programming and Data Structures Laboratory
10)	3	Practical	GE3361 Professional Development
11)	5	Theory	EE8501 Power System Analysis
12)	5	Theory	EE8551 Microprocessors and Microcontrollers
13)	5	Theory	EE8552 Power Electronics
14)	5	Theory	EE8591 Digital Signal Processing
15)	5	Theory	CS8392 Object Oriented Programming
16)	5	Theory	OMD551 Basics of biomedical Instrumentation
17)	5	Practical	EE8511 Control and Instrumentation Laboratory
18)	5	Practical	HS8581 Professional Communication
19)	5	Practical	CS8383 Object Oriented Programming Laboratory
20)	7	Theory	EE8701 High Voltage Engineering
21)	7	Theory	EE8702 Power System Operation and Control
22)	7	Theory	EE8703 Renewable Energy Systems
23)	7	Theory	GE8071 Disaster Management
24)	7	Theory	EE8009 Control of Electrical Drives
25)	7	Theory	OML751 Testing of Materials
26)	7	Practical	EE8711 Power System Simulation Laboratory
27)	7	Practical	EE8712 Renewable Energy Systems Laboratory

Course Outcomes – EVEN Semester 2022-23

Sl. No.	Semester	Theory/ Practical	Course Code / Course Name
1)	4	Theory	GE3451 Environmental Sciences and Sustainability
2)	4	Theory	EE3401 Transmission and Distribution
3)	4	Theory	EE3402 Linear Integrated Circuits and Applications
4)	4	Theory	EE3403 Measurements and Instrumentation
5)	4	Theory	EE3404 Microprocessor and Microcontroller
6)	4	Theory	EE3405 Electrical Machines - II
7)	4	Practical	EE3411 Electrical Machines Laboratory - II
8)	4	Practical	EE3412 Linear and Digital Circuits Laboratory
9)	4	Practical	EE3413 Microprocessor and Microcontroller laboratory
10)	6	Theory	EE8601 Solid State Drives
11)	6	Theory	EE8602 Protection and Switchgear
	6	Theory	EE8691 Embedded Systems
12)	6	Theory	EE8002 Design of Electrical Apparatus
13)	6	Theory	EE8005 Special Electrical Machines
14)	6	Practical	EE8661 Power Electronics and Drives Laboratory
15)	6	Practical	EE8681 Microprocessors and Microcontrollers Laboratory
16)	6	Practical	EE8611 Mini Project
17)	8	Theory	EE8011 Flexible AC Transmission Systems
18)	8	Theory	EI8073 Biomedical Instrumentation
19)	8	Practical	EE8811 Project Work

ODD Semester 2022-2023

III Semester B.E. EEE

MA3303 Probability and Complex Functions

COs Course Outcome : Upon successful completion of the course, students will be able to:

CO1: Understand the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real life phenomenon.

CO2: Understand the basic concepts of one and two dimensional random variables and apply in engineering applications.

CO3: To develop an understanding of the standard techniques of complex variable theory in particular analytic function and its mapping property.

CO4: To familiarize the students with complex integration techniques and contour integration techniques which can be used in real integrals..

CO5: To acquaint the students with Differential Equations which are significantly used in engineering problems.

EE3301 Electromagnetic Theory

Course Outcome : Upon the successful completion of the course, students will be able to:

CO1: Visualize and explain Gradient, Divergence, and Curl operations on electromagnetic vector fields and identify the electromagnetic sources and their effects.

CO2: Compute and analyze electrostatic fields, electric potential, energy density along with their applications.

CO3: Compute and analyze magneto static fields, magnetic flux density, vector potential along with their applications.

CO4: Explain different methods of emf generation and Maxwell's equations

CO5: Explain the concept of electromagnetic waves and characterizing parameters.

EE3302 Digital Logic Circuits

COs Course Outcome : Upon the successful completion of the course, students will be able to:

CO1 Explain various number systems and characteristics of digital logic families

CO2: Apply K-maps and Quine McCluskey methods to simplify the given Boolean expressions

CO3: Explain the implementation of combinational circuit such as multiplexers and de multiplexers - code converters, adders, subtractors, Encoders and Decoders

CO4: Design various synchronous and asynchronous circuits using Flip Flops

CO5: Explain asynchronous sequential circuits and programmable logic devices

CO6: Use VHDL for simulating and testing RTL, combinatorial and sequential circuits

EC3301 Electron Devices and Circuits

Course Outcome : Upon successful completion of the course, the students will be able to:

CO1- Explain the structure and operation of PN junction devices (diode, Zener diode, LED and Laser diode)

CO2- Design clipper, clamper, half wave and full wave rectifier, regulator circuits using PN junction diodes

CO3- Analyze the structure and characteristics BJT, FET, MOSFET, UJT, Thyristor and IGBT

CO4- Analyze the performance of various configurations of BJT and MOSFET based amplifier

CO5- Explain the characteristics of MOS based cascade and differential amplifier
CO6- Explain the operation of various feedback amplifiers and oscillators

EE 3303- ELECTRICAL MACHINES - I
COs Course Outcome : At the end of the course students will be able to:
CO1- Apply the laws governing the electromechanical energy conversion for singly and multiple excited systems.
CO2- Explain the construction and working principle of DC machines.
CO3- Interpret various characteristics of DC machines
CO4- Compute various performance parameters of the machine, by conducting suitable tests
CO5- Draw the equivalent circuit of transformer and predetermine the efficiency and regulation
CO6- Describe the working principle of auto transformer, three phase transformer with different types of connections

CS3353 C PROGRAMMING AND DATA STRUCTURES
Course Outcome : Upon the completion of this course the students will be able to
CO1: Develop C programs for any real world/technical application.
CO2: Apply advanced features of C in solving problems
CO3: Write functions to implement linear and non-linear data structure operations.
CO4: Suggest and use appropriate linear/non-linear data structure operations for solving a given problem.
CO5: Appropriately use sort and search algorithms for a given application.
CO6: Apply appropriate hash functions that result in a collision free scenario for data storage and retrieval.

Laboratory

EC3311 Electronic Devices and Circuits Laboratory
COs Course Outcome : Upon successful completion of the course, the students will be able to:
CO1- Analyze the characteristics of PN, Zener diode and BJT in CE,CC,CB configurations experimentally
CO2 - Analyze the characteristics of JFET and UJT experimentally
CO3 - Analyze frequency response characteristics of a Common Emitter amplifier experimentally
CO4 - Analyze the characteristics of RC phase shift and LC oscillators experimentally
CO5 - Analyze the characteristics of half-wave and full-wave rectifier with and without filters experimentally
CO6 -Analyze the characteristics of FET based differential amplifier experimentally
CO7- Calculate the frequency and phase angle using CRO experimentally
CO8- Analyze the frequency response characteristics of passive filters experimentally

EE3311 Electrical Machines Laboratory – I
Course Outcome : At the end of the course students will be able to:
CO1- Construct the circuit with appropriate connections for the given DC machine/transformer.
CO2- Experimentally determine the characteristics of different types of DC machines.
CO3- Demonstrate the speed control techniques for a DC motor for industrial applications.
CO4- Identify suitable methods for testing of transformer and DC machines.
CO5- Predetermine the performance parameters of transformers and DC motor.
CO6- Understand DC motor starters and 3-phase transformer connections.

CS3362 C PROGRAMMING AND DATA STRUCTURES LABORATORY
COs Course Outcome : At the end of the course, the students will be able to:
CO1-Use different constructs of C and develop applications
CO2 - Write functions to implement linear and non-linear data structure operations
CO3 - Suggest and use the appropriate linear / non-linear data structure operations for a given problem
CO4 - Apply appropriate hash functions that result in a collision free scenario for data storage and Retrieval
CO5 - Implement Sorting and searching algorithms for a given application

GE3361 PROFESSIONAL DEVELOPMENT
COs Course Outcome : On successful completion the students will be able to
CO1- Use MS Word to create quality documents, by structuring and organizing content for their day to day technical and academic requirements
CO2- Use MS EXCEL to perform data operations and analytics, record, retrieve data as per requirements and visualize data for ease of understanding
CO3-Use MS PowerPoint to create high quality academic presentations by including common tables, charts, graphs, interlinking other elements, and using media objects.

V Semester B.E. EEE

EE8501 Power System Analysis
COs Course Outcome : The students, after the completion of the course, are having the
CO1. Ability to model the power system under steady state operating condition.
CO2. Ability to understand and apply iterative techniques for power flow analysis.
CO3. Ability to model and carry out short circuit studies on power system.
CO4. Ability to model and analyze stability problems in power system and to acquire knowledge on Fault analysis
CO5. Ability to model and understand various power system components and carry out power flow, short circuit and stability studies.

EE8551 MICROPROCESSORS AND MICROCONTROLLERS
COs Course Outcome : The students, after the completion of the course, are expected to
CO1. Ability to acquire knowledge in Addressing modes & instruction set of 8085 & 8051.
CO2. Ability to need & use of Interrupt structure 8085 & 8051.
CO3. Ability to understand the importance of Interfacing
CO4. Ability to explain the architecture of Microprocessor and Microcontroller.
CO5. Ability to write the assembly language programme.
CO6. Ability to develop the Microprocessor and Microcontroller based applications.

EE8552 POWER ELECTRONICS

COs Course Outcome : The students, after the completion of the course, are expected to

CO1: Understand different types of power semiconductor devices, their switching characteristics and driver circuits

CO2: Classify the various performance parameters in controlled rectifiers with different load conditions

CO3: Analyze DC–DC switching regulators with its Commutation Techniques and apply it for real time applications like SMPS

CO4: Explain the various pulse width modulated inverters for different loads and infer the effect of power quality disturbances over the system.

CO5: Analyze AC voltage controllers, Matrix Converters & Cyclo converters with various loads and infer its various configurations.

EE8591 Digital Signal Processing

Course Outcome : The students, after the completion of the course, are expected to

CO1: Ability to understand the importance of Fourier transform, digital filters and DS Processors.

CO2: Ability to acquire knowledge on Signals and systems & their mathematical representation.

CO3: Ability to understand and analyze the discrete time systems.

CO4: Ability to analyze the transformation techniques & their computation

CO5: Ability to understand the types of filters and their design for digital implementation.

CO6: Ability to acquire knowledge on programmability digital signal processor & quantization effects.

CS8392 Object Oriented Programming

Course Outcome : The students, after the completion of the course, are expected to

CO1-Develop Java programs using OOP principles

CO2-Develop Java programs with the concepts inheritance and interfaces

CO3-Build Java applications using exceptions and I/O streams

CO4-Develop Java applications with threads and generics classes

CO5-Develop interactive Java programs using swings

OMD551 Basics of biomedical Instrumentation

Course Outcome : The students, after the completion of the course, are expected to

CO1: To Learn the different bio potential and its propagation.

CO2: To get Familiarize the different electrode placement for various physiological recording

CO3: Students will be able design bio amplifier for various physiological recording

CO4: Students will understand various technique non electrical physiological measurements

CO5: Understand the different biochemical measurements

Laboratory

HS8581 - Professional Communication
Course Outcome : The students, after the completion of the course, are expected to
CO1: Make effective presentations.
CO2: Participate confidently in Group Discussions.
CO3: Attend job interviews and be successful in them.
CO4: Develop adequate Soft Skills required for the workplace.
CO5: Improve the ability to understand the nuances of Grammar.

EE8511 Control and Instrumentation Laboratory
COs Course Outcome : The students, after the completion of the course, are expected to
CO1: Design compensators
CO2: Analyze the various types of converters.
CO3: Understand control theory and apply them to electrical engineering problems.
CO4: Study the simulation packages.
CO5: The basics of signal conditioning circuits.
CO6: Understand the basic concepts of bridge networks.

CS8383 Object Oriented Programming Laboratory
Course Outcome : The students, after the completion of the course, are expected to
CO1 Develop simple java programs that make use of classes and objects
CO2 Construct java programs using predefined classes and packages
CO3 Make use of Inheritances and Interfaces to develop java application
CO4 Model exception handling, multithreading, generic programming and file processing concepts in java
CO5 Build java application for real-time problems using Event Handling

VII Semester B.E. EEE

EE8701- High Voltage Engineering
COs Course Outcome : The students, after the completion of the course, are having the
CO1 -Ability to understand various types of over voltages in power system.
CO2 -Ability to Understand the concept of Breakdown mechanism in solid, liquid and gaseous dielectrics
CO3 - Ability to understand Generation of high voltages.
CO4 -Ability to understand measurement of high voltages.
CO5 - Ability to test power apparatus and insulation coordination

EE8702 Power System Operation and Control
COs Course Outcome : The students, after the completion of the course, are having the

CO1. Ability to understand the day-to-day operation of electric power system.
CO2. Ability to analyze the control actions to be implemented on the system to meet the minute-to-minute variation of system demand.
CO3. Ability to understand the significance of power system operation and control.
CO4. Ability to acquire knowledge on real power-frequency interaction.
CO5. Ability to understand the reactive power-voltage interaction.
CO6. Ability to design SCADA and its application for real time operation.

EE8703 Renewable Energy Systems
Course Outcome : The students, after the completion of the course, are having the
CO1- Ability to create awareness about renewable Energy Sources and technologies.
CO2-Ability to explain the Wind energy resources and technologies and their applications.
CO3-Ability to explain the solar energy resources and technologies and their applications.
CO4-Ability to explain the basics about biomass energy
CO5-Ability to explain the other renewable energy sources technologies and their applications.

GE8071 Disaster Management
Course Outcome : The students, after the completion of the course, are expected to
CO1: Differentiate the types of disasters, causes and their impact on environment and society.
CO2: Assess vulnerability and various methods of risk reduction measures as well as mitigation.
CO3: Draw the vulnerability profile of India, Scenarios in Indian context, disaster damage assessment and management.

EE8009 Control of Electrical Drives
COs Course Outcome : The students, after the completion of the course, are having the
CO1. Ability to understand the DC drives control.
CO2. Ability to study and analyze the Induction motor drive control.
CO3. Ability to study and understand the Synchronous motor drive control.
CO4. Ability to study and analyze the SRM and BLDC motor drive control.
CO5. Ability to analyze and design the Digital control for drives.

OML751 Testing of Materials
Course Outcome : The students, after the completion of the course, are expected to
CO1: Identify suitable testing technique to inspect industrial component
CO2: Possess the ability to use mechanical testing technique and know its applications and limitations
CO3: Possess the ability to use non destructive testing technique and know its applications and limitations
CO4: Possess the ability to use material characterization testing technique and know its applications and limitations
CO5: Possess the ability to use thermal and chemical testing technique and know its applications and limitations

Laboratory

EE8712 Renewable Energy Systems Laboratory

Course Outcome : The students, after the completion of the course, are having the

CO1: Ability to understand and analyze Renewable energy systems

CO2: Ability to train the students in Renewable Energy Sources and technologies.

CO3: Ability to provide adequate inputs on a variety of issues in harnessing Renewable Energy.

CO4: Ability to simulate the various Renewable energy sources.

CO5: Ability to recognize current and possible future role of Renewable energy sources.

CO6: Ability to understand basics of Intelligent Controllers.

EE8711-Power System Simulation Laboratory

COs Course Outcome : The students, after the completion of the course, are having the

CO1. Ability to understand power system planning and operational studies

CO2. Ability to acquire knowledge on Formation of Bus Admittance and Impedance Matrices and Solution of Networks.

CO3. Ability to analyze the power flow using GS and NR method

CO4. Ability to find Symmetric and Unsymmetrical fault

CO5. Ability to understand the economic dispatch.

CO6. Ability to analyze the electromagnetic transients.

EVEN Semester

IV Semester – B.E. EEE

GE3451 ENVIRONMENTAL SCIENCES AND SUSTAINABILITY

Course Outcome : Upon successful completion of the course, students should be able to:

CO1: To recognize and understand the functions of environment, ecosystems and biodiversity and their conservation

CO2: To identify the causes, effects of environmental pollution and natural disasters and contribute to the preventive measures in the society.

CO3: To identify and apply the understanding of renewable and non-renewable resources and contribute to the sustainable measures to preserve them for future generations.

CO4: To recognize the different goals of sustainable development and apply them for suitable technological advancement and societal development.

CO5: To demonstrate the knowledge of sustainability practices and identify green materials, energy cycles and the role of sustainable urbanization.

EE3401 TRANSMISSION AND DISTRIBUTION

Course Outcome : On the successful completion of the course, students will be able to:

CO1: Understand the structure of power system, computation of transmission line parameters for different configurations.

CO2: Model the transmission lines to determine the line performance and to understand the impact of Ferranti effect and corona on line performance.

CO3: Do Mechanical design of transmission lines, grounding and to understand about the insulators in transmission system.

CO4: Design the underground cables and understand the performance analysis of underground cable.

CO5: Understand the modelling, performance analysis and modern trends in distribution system.

EE3402 LINEAR INTEGRATED CIRCUITS

COs Course Outcome : Upon successful completion of the course, the students will be able to:

CO1. Explain monolithic IC fabrication process

CO2. Explain the fabrication of diodes, capacitance, resistance, FETs and PV Cell.

CO3. Analyze the characteristics and basic applications (inverting/non-inverting amplifier, summer, differentiator, integrator, V/I and I/V converter) of Op-Amp

CO4. Explain circuit and applications of op-amp based instrumentation amplifier, log/antilog amplifier, analog multiplier /divider, active filters, comparators, waveform generators, A/D and D/A converters

CO5. Explain Functional blocks, characteristics and applications of Timer, PLL, analog multiplier ICs.

CO6. Explain the applications of ICs in Instrumentation amplifier, fixed and variable voltage regulator, SMPS and function generator

EE3403 MEASUREMENTS AND INSTRUMENTATION

COs Course Outcome : Upon successful completion of the course, the students should have the:

CO1: Ability to understand the fundamental art of measurement in engineering.

CO2: Ability to understand the structural elements of various instruments.

CO3: Ability to understand the importance of bridge circuits.

CO4: Ability to understand about various transducers and their characteristics by experiments.

CO5: Ability to understand the concept of digital instrumentation and virtual instrumentation by experiments.

EE3404 MICROPROCESSOR AND MICROCONTROLLER

Course Outcome : Upon successful completion of the course, the students should have the:

CO1: Ability to write assembly language program for microprocessor and microcontroller

CO2: Ability to design and implement interfacing of peripheral with microprocessor and microcontroller

CO3: Ability to analyze, comprehend, design and simulate microprocessor based systems used for control and monitoring.

CO4: Ability to analyze, comprehend, design and simulate microcontroller based systems used for control and monitoring.

CO5: Ability to understand and appreciate advanced architecture evolving microprocessor field

EE3405 ELECTRICAL MACHINES - II

COs Course Outcome : Upon the successful completion of the course, students will have the:

CO1: Ability to understand the construction and working principle of Synchronous generator

CO2: Ability to understand the construction and working principle of Synchronous Motor

CO3: Ability to understand the construction and working principle of Three Phase Induction Motor

CO4: Acquire knowledge about the starting and speed control of induction motors.

CO5: To gain knowledge about the basic principles and working of Single phase induction motors and Special Electrical Machines.

Laboratory

EE3411 Electrical Machines Laboratory-II
COs Course Outcome : At the end of the course, the student should have the:
CO1: Ability to understand and analyze EMF and MMF methods
CO2: Ability to analyze the characteristics of V and Inverted V curves
CO3: Acquire hands on experience of conducting various tests on alternators and obtaining their performance indices using standard analytical as well as graphical methods. to understand the importance of Synchronous machines
CO4: Acquire hands on experience of conducting various tests on induction motors and obtaining their performance indices using standard analytical as well as graphical methods. to understand the importance of single and three phase Induction motors
CO5: Ability to acquire knowledge on separation of losses

EE3412 LINEAR AND DIGITAL CIRCUITS LABORATORY
COs Course Outcome : At the end of the course, the student should have the:
CO1: Ability to understand and implement Boolean Functions.
CO2: Ability to understand the importance of code conversion
CO3: Ability to Design and implement circuits with digital ICs like decoders, multiplexers,register.
CO4: Ability to acquire knowledge on Application of Op-Amp
CO5: Ability to Design and implement counters using analog ICs like timers, VCOs and digital ICs like Flip-flops and counters.

EE3413 MICROPROCESSOR AND MICROCONTROLLER LABORATORY
Course Outcome : After studying the above subject, students should have the:
CO1: Ability to write assembly language program for microprocessor.
CO2: Ability to write assembly language program for microcontroller
CO3: Ability to design and implement interfacing of peripheral with microprocessor and microcontroller
CO4: Ability to analyze, comprehend, design and simulate microprocessor based systems used for control and monitoring
CO5: Ability to analyze, comprehend, design and simulate microcontroller based systems used for control and monitoring.

VI Semester B.E. EEE

EE8601 Solid State Drives
COs Course Outcome : The students, after the completion of the course, are expected to
CO1: Study about the steady state operation and transient dynamics of a motor load system.
CO2: Analyze the operation of the converter/chopper fed dc drive.
CO3: Analyze the operation and performance of induction motor drives.
CO4 : Analyze the operation and performance of synchronous motor drives.
CO5: Analyze and design the current and speed controllers for a closed loop solid state DC motor drive.

EE8602 – Protection And Switchgear
COs Course Outcome : The students, after the completion of the course, are having the
CO1- Ability to find the causes of abnormal operating conditions of the apparatus and system.
CO2 - Ability to analyze the characteristics and functions of Electromagnetic Relays.
CO3 - Ability to study about the apparatus protection
CO4 - Ability to study about the static and numerical relays.
CO5 - Ability to acquire knowledge on functioning of circuit breaker.

EE8691 Embedded Systems
Course Outcome : The students, after the completion of the course, have the
CO1: Ability to understand and analyze Embedded systems.
CO2: Ability to suggest an embedded system for a given application.
CO3: Ability to operate various Embedded Development Strategies
CO4: Ability to study about the bus Communication in processors and ability to acquire knowledge on various processor scheduling algorithms
CO5: Ability to understand basics of Real time operating system.

EE8002 Design of Electrical Apparatus
Course Outcome : The students, after the completion of the course, are expected to
CO1: Ability to understand basics of design considerations for rotating and static electrical machines
CO2: Ability to design of field system for its application.
CO3: Ability to design sing and three phase transformer.
CO4: Ability to design armature and field of DC machines.
CO5: Ability to design stator and rotor of induction motor.
CO6: Ability to design and analyze synchronous machines.

EE8005 Special Electrical Machines
Course Outcome : The students, after the completion of the course, are having the
CO1- Ability to acquire the knowledge on construction and operation of stepper motor.
CO2- Ability to construction, principle of operation, switched reluctance motors.
CO3- Ability to acquire the knowledge on construction and operation of permanent magnet brushless D.C. motors.
CO4- Ability to acquire the knowledge on construction and operation of permanent magnet synchronous motors.
CO5- Ability to select a special Machine for a particular application.

Laboratory

EE8661Power Electronics and Drives Laboratory
COs Course Outcome : The students, after the completion of the course, are having the
CO1. Ability to practice and understand converter and inverter circuits and

apply software forengineering problems.
CO2. Ability to experiment about switching characteristics various switches.
CO3. Ability to analyze about AC to DC converter circuits.
CO4. Ability to analyze about DC to AC circuits.
CO5. Ability to acquire knowledge on AC to AC converters
CO6. Ability to acquire knowledge on simulation software.

EE8681 – Microprocessors and Microcontrollers Laboratory
COs Course Outcome : The students, after the completion of the course, are expected to
CO1: Ability to understand and apply computing platform and software for engineering problems.
CO2: Ability to programming logics for code conversion.
CO3: Ability to acquire knowledge on A/D and D/A.
CO4: Ability to understand basics of serial communication.
CO5: Ability to understand and impart knowledge in DC and AC motor interfacing.
CO6: Ability to understand basics of software simulators.

EE8611 Mini Project
Course Outcome :
CO1: On Completion of the mini project work students will be in a position to take up their final year project work and find solution by formulating proper methodology.

VIII Semester B.E. EEE

EE8011 Flexible AC Transmission system
Course Outcome : The students, after the completion of the course, they have the
C01: Ability to understand, analyze and develop analytical model of FACTS controllers.
C02: Ability to understand the power system application.
C03: Ability to understand the concepts about load compensation techniques.
C04: Ability to acquire knowledge on facts devices.
C05: Ability to understand the start-of-art of the power system.

EI8073 Biomedical Instrumentation
Course Outcome : At the end of the course students will have the
CO1: Ability to understand the philosophy of the heart, lung, blood circulation and respiration system.
CO2: Ability to provide latest ideas on devices of non-electrical devices.
CO3: Ability to gain knowledge on various sensing and measurement devices of electrical origin.
CO4: Ability to bring out the important and modern methods of imaging techniques and their analysis.
CO5: Ability to explain the medical assistance/techniques, robotic and therapeutic equipments.

Laboratory

EE8811- PROJECT WORK

COs Course Outcome : The students, after the completion of the course, are expected to

CO1: On Completion of the project work students will be in a position to take up any challenging practical problems and find solution by formulating proper methodology