COURSE OUTCOMES

REGULATION: R2013
SEMESTER: III
Course Code and Name: MA6351 Transforms and Partial Differential Equations

Course Outcomes	Description
C201.1	To represent the physical processes as partial differential equations and solve both homogenous and non homogeneous equations.
C201.2	To solve Fourier series concept to many applications in engineering.
C201.3	To solve boundary value problems involving heat equation and wave equation.
C201.4	To solve definite integrals by using Fourier Transform techniques.
C201.5	Construct Z- transform and find inverse Z-transform techniques for discrete systems.
C201.6	To solve difference equations using Z - transforms.

SEMESTER: III
Course Code and Name: EE6301 Digital Logic Circuits

Course Outcomes	Description
C202.1	Convert various number systems; simplify the logical expressions using Boolean functions and compare Digital Logic Families.
C202.2	Design of combinational logic circuits, multiplexer, demultiplexer and code converters.
C202.3	Design of asynchronous counters, synchronous counters, modulo counters and synchronous sequential circuits.
C202.4	Analyze asynchronous sequential circuits and compare

	various Programmable Logic Devices
C202.5	Develop the program for combinational circuits using VHDL
C202.6	Develop the program for Sequential circuits using VHDL

SEMESTER: III
Course Code and Name: EE6302 Electromagnetic theory

Course Outcomes	Description
C203.1	Relate the basic mathematical concepts to electromagnetic vector fields
C203.2	Interpret the concepts of electrostatics, electrical potential, energy density and their applications
C203.3	Discuss the concepts of magneto statics, magnetic flux density, scalar and vector potential and its applications
C203.4	Relate the Faraday's law, Induced emf and Maxwell's equations
C203.5	Interpret the concepts of electromagnetic waves and pointing vectors
C203.6	Summarize the transmission line equations

SEMESTER: III
Course Code and Name: GE6351 Environmental Science and Engineering

Course Outcomes	Description
C204.1	Identify the scientific, technological, economical and political solutions for environmental problems
C204.2	Illustrate the inter relationships between living organisms and environment
C204.3	Summarize the importance of environment by accessing its impact on human world, its functions and values
C204.4	Infer the dynamic processes and features of earth interior surface
C204.5	Identify the integrated themes of biodiversity and natural

	recourses
C204.6	Identify the methods of managing wastes and pollution control

SEMESTER: III
Course Code and Name: EC6202 Electronic Devices and Circuits

Course Outcomes	Description
C205.1	Design and analyze the Rectifier circuits using PN Junction diodes
C205.2	Differentiate the structures and working principle of Electronic switches like UJT, BJT, MOSFET etc..
C205.3	Design and analyze the Amplifier circuits using BJT and FET
C205.4	Design Differential & single tuned & Power amplifiers and analyze the parameters to judge their quality.
C205.5	Classify and compare different types of negative feedback in amplifiers,
C205.6	Classify and compare different types of Oscillator circuits

SEMESTER: III
Course Code and Name: EE6303 Linear Integrated Circuits and Applications

Course Outcomes	Description
C206.1	Differentiate Integrated circuits and Discrete circuits, understand the manufacturing process of ICs and analyze how monolithic components are being developed.
C206.2	Identify different configurations of Op Amp , analyze the parameters and observe the frequency response of Op Amp
C206.3	Demonstrate the design of various applications of Op Amps such as filters, multivibrators, waveform generators,

	A/D and D/A converter
C206.4	Demonstrate the design various applications of IC 555 timer and PLL
C206.5	Demonstrate the various applications of voltage regulator ICs
C206.6	Demonstrate different types of special ICs such as function generator IC, power amplifier IC.

SEMESTER: III
Course Code and Name: EC6361 Electronics Laboratory

Course Outcomes	Description
C207.1	Experiment the characteristics of diodes
C207.2	Experiment the characteristics of transistors
C207.3	Experiment the characteristics of Oscillators, Photodiodes & Phototransistors
C207.4	Analyze the filters with different cut off frequencies.
C207.5	Experiment the characteristics of Multivibrators.
C207.6	Experiment the characteristics of Amplifiers

SEMESTER: III
Course Code and Name: EE6311 Linear and Digital Integrated Circuits Laboratory

Course Outcomes	Description
C208.1	Infer the Boolean functions using logic gates. Design and infer addition and subtraction using Adder and Subtraction circuits
C208.2	Design the BCD to Excess-3 and Binary to Gray code converters and their vice-versa using logic gates and evaluate their operation with their respective truth tables

C208.3	Design Odd and Even parity generators and checkers and evaluate their operation with their respective truth tables. Design Encoder and Decoders and evaluate their operation with their respective truth tables.
C208.4	Design 4-bit synchronous and asynchronous counters and evaluate their operation with their respective truth tables. Design 4-bit Shift registers and evaluate their operation with their respective truth tables.
C208.5	Design Multiplexer and Demultiplexer and evaluate their operation with their respective truth tables. Design Astable and Monostable multivibrators using IC 555
C208.6	Design inverting , non-inverting amplifiers , adder , comparator, integrator and differentiator using IC 741 OP-AMP and evaluate their operation. Design Voltage to Frequency Converter using 566IC and frequency multiplier using 565 IC

SEMESTER: IV
Course Code and Name: MA6459 Numerical Methods

Course Outcomes	Description
C209 .1	Calculate the solution of algebraic and transcendal system of linear equations.
C209.2	To interpolate the values of unknown functions using Newton's Formula
C209.3	Interpret the numerical values of the derivatives and integrals of unknown function
C209.4	Demonstrate first and second order to initial value problem
C209.5	Execute Numerically boundary value problem
C209.6	classify the solution PDE models representing temporal variations in physical systems through numerical methods.

SEMESTER: IV
Course Code and Name: EE6401 Electrical Machines – I

Course Outcomes	Description
C2010.1	Distinguish the techniques of magnetic circuit analysis and review of various magnetic materials
C2010.2	Demonstrate the working principal, prediction of performance, methods of testing the transformers and three phase transformer connections
C2010.3	Demonstrate the working principles of electrical machines using the concepts of electro mechanical energy conversion principle and determine the expressions for generated voltage and torque developed in all electrical machines
C2010.4	Demonstrate the working principle of AC machines, Determination of no load characteristics
C2010.5	Differentiate the various starting methods and speed control methods of DC motor
C2010.6	Estimate the various losses taking place in DC motor and distinguish the different testing methods of DC motor.

SEMESTER: IV
Course Code and Name: CS6456 Object Oriented Programming

Course Outcomes	Description
C2011.1	Define the need and the basic concepts of Object Oriented Programming
C2011.2	Apply the important features of Object Oriented Programming such as Classes, Objects, Inheritance and Polymorphism
C2011.3	Illustrate the concepts of templates and Exception handling in real world applications
C2011.4	Examine the working of RTTTI and casting
C2011.5	Interpret the working of IO Streams, file handling and

	standard template library in practical applications
C2011.6	Evaluate real time applications in an efficient manner using Object Oriented Programming principles

SEMESTER: IV
Course Code and Name: EE6402 Transmission and Distribution

Course Outcomes	Description
C2012.1	Differentiate EHVAC and EHVDC systems Distinguish the operation of distribution schemes
C2012.2	Develop the expression of transmission line parameters and computation of line parameters
C2012.3	Construct the equivalent circuits for the transmission lines based on distance and voltage and determination of voltage regulation and efficiency
C2012.4	Identify the various types of cables, insulators and computation of computation of voltage distribution in insulators strings
C2012.5	Analyze the transmission line in mechanical consideration
C2012.6	Differentiate the various methods of grounding and substations

SEMESTER: IV
Course Code and Name: EE6403 Discrete Time Systems and Signal Processing

Course Outcomes	Description
C2013.1	Differentiate the types of systems and signals
C2013.2	Differentiate the properties of Z- Transform Analyze the stability of systems
C2013.3	Analyze the properties of DFT

	Compute the DFT using FFT algorithm
C2013.4	Design analog and digital filters Construct parallel and cascaded form of filters
C2013.5	Distinguish the various digital signal processors
C2013.6	Categorize different DSP processors for commercial applications

SEMESTER: IV
Course Code and Name: EE6404 Measurements and Instrumentation

Course Outcomes	Description
C2014.1	Illustrate the fundamental block diagram and the characteristics of instruments and analyze the statistical measurement of data
C2014.2	Relate the construction and working principle of various types of analog and digital meters and to determine BH curve and iron loss of the ring specimen in magnetic measurements
C2014.3	Apply A.C and D.C potentiometers for measuring unknown emf , prioritizes various types of A.C and D.C bridges for measuring R,L,C
C2014.4	Classify the types of storage devices and display devices
C2014.5	Distinguish various types of transducers
C2014.6	Apply Data Acquisition system and ADC & DAC in real time measuring system

SEMESTER: IV
Course Code and Name: CS6461 Object Oriented Programming Laboratory

Course Outcomes	Description

C2015.1	Define the need and the basic concepts of Object Oriented Programming
C2015.2	Apply the important features of Object Oriented Programming such as Classes, Objects, Inheritance and Polymorphism
C2015.3	Illustrate the concepts of templates and Exception handling in real world applications
C2015.4	Examine the working of RTTTI and casting
C2015.5	Interpret the working of IO Streams, file handling and standard template library in practical applications
C2015.6	Evaluate real time applications in an efficient manner using Object Oriented Programming principles

SEMESTER: IV
Course Code and Name: EE6411 Electrical Machines Laboratory – I

Course Outcomes	Description
C2016.1	To obtain the open circuit and load characteristics of self excited dc generator
C2016.2	To obtain the open circuit and load characteristics of separately excited dc generator
C2016.3	To obtain the performance characteristics of Dc compound and Dc Shunt motor
C2016.4	To obtain the performance characteristics of Dc Series motor
C2016.5	To obtain the speed control on dc shunt motor
C2016.6	To obtain the performance characteristics of single phase transformer

SEMESTER: V

Course Code and Name: EE6501 Power System Analysis

Course Outcomes	Description
C301.1	Develop the models for power system components under steady state operating condition and represent the power system network by impedance diagram.
C301.2	Apply numerical methods to solve the power flow problem
C301.3	Determine the performance of power system under balanced faulted condition.
C301.4	Determine the performance of power system under unbalanced faulted condition.
C301.5	Analyze the transient behavior of the power system when it is subjected to a fault.
C301.6	Apply numerical methods to analyze the stability of the power system

SEMESTER: V
Course Code and Name: EE6502 Microprocessors and Microcontrollers

Course Outcomes	Description
C302.1	Illustrate the various hardware and software architectural details of 8085 microprocessor
C302.2	Categorize the various addressing modes supported by instruction set of 8085 microprocessor
C302.3	Illustrate the various hardware and software architectural features of 8051 microcontroller
C302.4	Analyze the architecture and need of various peripheral ICs and choose the ICs based on application
C302.5	Categorize the various addressing modes supported by instruction set of 8051 microcontroller
C302.6	Apply the concepts of architectural features and instruction

	set of 8051 microcontroller in interfacing to stepper motor , servo motor and washing machine

SEMESTER: V
Course Code and Name: ME6701 Power Plant Engineering

Course Outcomes	Description
C303.1	Summarize the construction and working of thermal power plant, analyze the working of Rankine cycle with its improvisations
C303.2	Analyze and optimize Diesel, Otto, Dual and Brayton cycle, Summarize the construction and working of diesel and gas turbine power plant
C303.3	Infer the operations of nuclear power plant and the safety measures adopted in nuclear power plant
C303.4	Differentiate the various types of renewable energy systems. Summarize the working of hydro electric power plant.
C303.5	Analyze the load distribution criteria, capital and operating cost of different power plant and tariff types.
C303.6	Compare the site selection criteria for different power plants, distinguish the various pollutions control technologies.

SEMESTER: V
Course Code and Name: EE6503 Power Electronics

Course Outcomes	Description
C304.1	Distinguish the types of power semiconductor devices, and analyze their switching characteristics
C304.2	Construct and demonstrate the operation of controlled rectifiers, and analyze its characteristics and performance parameters of controlled rectifiers

C304.3	Construct and demonstrate the operation of DC-DC switching regulators, and differentiate the switching techniques and basics topologies of DC-DC switching regulators.
C304.4	Apply the different modulation techniques to pulse width modulated inverters and identify the harmonic reduction methods.
C304.5	Construct and demonstrate the operation of AC voltage controller and differentiate its various configurations.
C304.6	Associate cyclo-converter and matrix converter in AC-AC applications.

SEMESTER: V
Course Code and Name: EE6504 Electrical Machines II

Course Outcomes	Description
C305.1	Differentiate the construction and performance of salient pole and non-salient pole synchronous generators.
C305.2	Illustrate the principle of operation and to determine the performance of synchronous motor.
C305.3	Differentiate the construction and performance of three phase induction motor.
C305.4	Demonstrate the speed control methods of three phase induction motor and differentiate the types of starters in AC machines
C305.5	Differentiate the construction and performance of single phase induction motor.
C305.6	Analyze the construction, principle of operation and performance of special machines.

SEMESTER: V
Course Code and Name: IC6501 Control Systems

Course Outcomes	Description
C306.1	Analyze the use of transfer function models for different physical systems. Differentiate the working of AC and DC servomotors. Analyze the different reduction techniques to determine the transfer function.
C306.2	Determine the order of the system, different time domain specifications and steady state errors. Predict the stability of the open loop systems and differentiate the effects of feedback controllers.
C306.3	Analyze the open loop and closed loop frequency response of the system and compare the effects of compensators on frequency response.
C306.4	Predict the stability of the closed loop systems and design the compensators using bode plot.
C306.5	Construct the state model for linear and time invariant Systems and determine the solution of state and output equation in controllable canonical form.
C306.6	Analyze the concepts of controllability and observability and effects of state feedback.

SEMESTER: V
Course Code and Name: EE6511 Control and Instrumentation Laboratory

Course Outcomes	Description
C307.1	Analyze the time response characteristics of I order and II order, type 0 and type1 systems using P, PI and PID controllers.
C307.2	Analyze the stability of linear system and to simulate the first order and second order system using mathematical development tools.
C307.3	Analyze the AC and DC servomotor position control system and to understand the characteristics of synchro

	transmitter and synchro receiver.
C307.4	Evaluate the performance of bridge networks and transducers.
C307.5	Evaluate the power in three phase circuits and energy in single phase circuit and to evaluate the gain using instrumentation amplifier.
C307.6	Analyze the design of an analog to digital converter and digital to analog converter.

SEMESTER: V
Course Code and Name: GE6563 Communication Skills - Laboratory Based

Course Outcomes	Description
C308.1	Attribute an environment to acquire writing skills to enable publication of articles.
C308.2	Utilize electronic media to enhance listening and speaking skills.
C308.3	Infer the strategies to ace National and International Examinations and Placements.
C308.4	Distinguish one's leadership traits, team work, time management, stress management and life planning
C308.5	Classify intercultural communication, multiple emotional intelligence, spiritual quotient.
C308.6	Carry out basic communication skills to the advanced level required for Engineers

SEMESTER: V
Course Code and Name: EE6512 Electrical Machines Laboratory – II

Course Outcomes	Description

C309.1	Evaluate the regulation of three phase alternator by Emf, Mmf, ZPF, ASA and Slip Test
C309.2	Analyze the Characteristics of three phase induction Motor by conducting load test and slip test on Induction Motor
C309.3	Analyze the inverted V and V characteristics of three phase induction motor
C309.4	Evaluate the losses for three phase induction Motor
C309.5	Analyze the efficiency of three phase induction motor by conducting no-load test and load test with the help of equivalent circuit
C309.6	Analyze the efficiency of single phase induction motor by conducting no-load test and load test with the help of equivalent circuit

SEMESTER: VI
Course Code and Name: EC6651 Communication Engineering

Course Outcomes	Description
C3010.1	Analyze different methods of analog communication and their significance
C3010.2	Illustrate digital communication methods for high bit rate transmission
C3010.3	Apply the concepts of source and line coding techniques for enhancing rating of transmission by minimizing the errors during transmission.
C3010.4	Suggest multiple access techniques for enhancing the number of users in communication.
C3010.5	Summarize multiple access techniques used in satellite communication
C3010.6	Outline the fibre optical system used in communication

SEMESTER: VI
Course Code and Name: EE6601 Solid State Drives

Course Outcomes	Description
C3011.1	Illustrate the steady state operation and transient dynamics of a motor load system.
C3011.2	Compare the operation of the converter/chopper fed dc drive, both qualitatively and quantitatively-
C3011.3	Demonstrate the VSI fed of Induction Motor drives.
C3011.4	Distinguish the different control strategies of Synchronous Motor drives
C3011.5	Analyze the current and speed controllers for a closed loop solid state DC motor Drive
C3011.6	Illustrate the different modes of voltage control and converter selection and characteristics.

SEMESTER: VI
Course Code and Name: EE6602 Embedded Systems

Course Outcomes	Description
C3012.1	Comprehend the building blocks of Embedded System and identify the factors to consider in selection of processors
C3012.2	Compare various I/O device ports and buses and various serial bus communication protocols
C3012.3	Classify the various stages of EDLC & and issues in hardware-software co-design
C3012.4	Compare the different inter process communication techniques used in RTOS
C3012.5	compare different RTOS Vxworks & RT linux
C3012.6	Illustrate the case study of Washing machine, Automotive application and Smart card system application

SEMESTER: VI
Course Code and Name: EE6603 Power System Operation and Control

Course Outcomes	Description
C3013.1	Illustrate the importance of load characteristics and load forecasting curves.
C3013.2	Describe the load sharing between two synchronous machines and to relate static and dynamic analysis.
C3013.3	Summarize the basics of reactive power control and to compare the methods of voltage control
C3013.4	Illustrate the coordination equation with and without loss
C3013.5	Compare the computer control of power systems using SCADA and EMS functions
C3013.6	Distinguish various state transitions and control strategies.

SEMESTER: VI
Course Code and Name: EE6604 Design of Electrical Machines

Course Outcomes	Description
C3014.1	Differentiate the thermal rating of various electrical machines.
C3014.2	Design the armature and field system for dc machines.
C3014.3	Design the core, yoke, windings and cooling systems of transformer.
C3014.4	Design the stator and rotor of induction machines.
C3014.5	Design the stator and rotor of synchronous machines.
C3014.6	Design of turbo alternators

SEMESTER: VI
Course Code and Name: EE6002 Power System Transients

Course Outcomes	Description
C3015.1	Infer the causes and effects of transients on power systems
C3015.2	Illustrate the over voltages due to switching transients, distinguish the types of switching transients
C3015.3	Compare the various theories of charge formation in clouds, infer the mechanism and characteristics of lightning strokes
C3015.4	Illustrate the propagation, reflection and refraction of travelling waves
C3015.5	Infer the impact of voltage transients caused by faults, circuit breakers action and load rejection on power systems.
C3015.6	Apply electromagnetic transients program (EMTP) for computation of transients.

SEMESTER: VI
Course Code and Name: EE6611 Power Electronics and Drives Laboratory

Course Outcomes	Description
C3016.1	Analyze and to understand the characteristics of power electronic switching devices SCR,TRIAC, MOSFET and IGBT.
C3016.2	Analyze and to understand the characteristics of half and fully controlled converter. Simulate Single phase and three phase converters and voltage controllers.
C3016.3	Analyze and to understand the characteristics of Step up and Step down chopper
C3016.4	Analyze and to understand the characteristics of IGBT based single and three phase PWM inverter
C3016.5	Analyze and to understand the characteristics of AC voltage Controller
C3016.6	Analyze and to understand the characteristics of Switched

	Mode Power Supply (SMPS)

SEMESTER: VI
Course Code and Name: EE6612 Microprocessors and Microcontrollers Laboratory

Course Outcomes	Description
C3017.1	Write the Program and find the opcodes and Execute the basic arithmetic programs and sorting algorithms and code conversions using 8085 Kit
C3017.2	Interface different peripheral devices like 8255, 8279 etc.. to 8085 kit and write and execute programs to make the operative.
C3017.3	Design a traffic light control module and write a program for traffic light control lights with proper time delays.
C3017.4	Get Hands on programming exercise using 8051 Micro controller
C3017.5	Interfacing A/D and D/A converters with 8085 & 8051 kits and program them
C3017.6	Interfacing stepper & DC motors with 8051

SEMESTER: VI
Course Code and Name: EE6613 Presentation Skills and Technical Seminar

Course Outcomes	Description
C3018.1	Distinguish themselves from each individual by giving a self introduction
C3018.2	Express their views on any general topic
C3018.3	Discuss on current scenario of ant social issues
C3018.4	Compare and present the knowledge and idea about any technical topic

C3018.5	Discuss the topic on any technical issue
C3018.6	Listen the views of the other students on current scenario and technical presentation.

SEMESTER: VII
Course Code and Name: EE6701 High Voltage Engineering

Course Outcomes	Description
C401.1	Classify the various types of over voltages in power system and protection methods
C401.2	Describe the Generation of over voltages in laboratories
C401.3	Distinguish the various types of measurement of over voltages
C401.4	Distinguish the nature of Breakdown mechanism in solid, liquid and gaseous dielectrics
C401.5	Discuss on Testing of power apparatus
C401.6	Discuss on Testing of insulation coordination

SEMESTER: VII
Course Code and Name: EE6702 Protection & Switchgear

Course Outcomes	Description
C402.1	Classify the causes of abnormal operating conditions (faults, lightning and switching surges) of the apparatus and system.
C402.2	Infer the characteristics and functions of relays and protection schemes.
C402.3	Distinguish the types of apparatus protection in power system network.
C402.4	Analyze the behavior of static and numerical relays during

	contingency period.
C402.5	Analyze the functioning of circuit breakers with different relays.
C402.6	Illustrate the causes of arc interruption in circuit breaker on the power system network.

SEMESTER: VII
Course Code and Name: EE6703 Special Electrical Machines

Course Outcomes	Description
C403.1	Distinguish the types of synchronous reluctance motor. Compare the principle of operation and performance of synchronous reluctance motor
C403.2	Differentiate the types of stepper motor, compare the construction ,Associate the principle of operation, performance of stepping motor
C403.3	Compare the construction, Associate the principle of operation & performance of SRM.
C403.4	Distinguish the construction, principle of operation, performance of BLDC motor
C403.5	Distinguish the construction, principle of operation, performance of PMSM
C403.6	Summarize power controllers and applications of PMSM

SEMESTER: VII
Course Code and Name: MG6851 Principles of Management

Course Outcomes	Description
C404.1	Classify and differentiate various managerial theories and relate these theories into practice in different Organizations.
C404.2	Summarize functional aspects of management, planning as

	well as decision making.
C404.3	Differentiate and categorize types of organizational structure, process of selection and performance appraisal.
C404.4	Relate the importance of motivation, leadership and communication in a management environment.
C404.5	Classify and compare various budgetary and Non budgetary control methods.
C404.6	Apply the control techniques in productivity problems & management

SEMESTER: VII
Course Code and Name: EE6004 Flexible AC Transmission Systems

Course Outcomes	Description
C405.1	Describe the concept of FACTS, Reactive power control and discuss the various types of compensation techniques, and classify the various types of FACTS devices.
C405.2	Illustrate the characteristics and applications of static VAR compensator, and apply modeling of SVC for stability studies.
C405.3	Describe the functional operation and applications of TCSC, and apply modeling of TCSC for power flow & stability studies.
C405.4	Describe the principle, operation of STATCOM & UPFC
C405.5	Classify & Discuss the various FACTS controller interactions
C405.6	Explain and apply coordination of controllers using linear control techniques & Genetic algorithms.

SEMESTER: VII
Course Code and Name: EE6008 Microcontroller Based System Design

Course Outcomes	Description

C406.1	To introduce the architecture of PIC microcontroller
C406.2	To educate on use of interrupts and timers
C406.3	To educate on the peripheral devices for data communication and transfer
C406.4	To introduce the functional blocks of ARM processor
C406.5	To introduce the various pipeline stages of ARM processor
C406.6	To introduce the various applications of ARM processor

SEMESTER: VII
Course Code and Name: EE6711 Power System Simulation Laboratory

Course Outcomes	Description
C407.1	Infer the parameters of transmission Lines
C407.2	Design the bus admittance and impedance matrices to find solution of networks.
C407.3	Design and implement the transient and small signal stability analysis model for Single-Machine Infinite Bus System
C407.4	Design the transient stability analysis model for Multi machine Power Systems
C407.5	Design the electromagnetic transients model for power systems
C407.6	Design the power system network for economic dispatch

SEMESTER: VII
Course Code and Name: EE6712 Comprehension

Course Outcomes	Description
C408.1	Define the concepts in circuits and networks

C408.2	Calculate the voltage, current, speed, torque and power in DC & AC machines
C408.3	Solve the steady state stability of first order & second order systems.
C408.4	Select logical circuits for digital systems.
C408.5	Identify the characteristics and working of various electronic devices.
C408.6	Calculate the current, voltage, power in the given DC & AC circuits

SEMESTER: VIII
Course Code and Name: EE6801 Electric Energy Generation, Utilization and Conservation

Course Outcomes	Description
C409.1	Distinguish between the conventional and non conventional methods of power generation
C409.2	Infer the Economic aspects of generation
C409.3	Classify the various illuminations schemes and design of illumination systems
C409.4	Compare the types of heating and welding system
C409.5	Illustrate the Traction motor control
C409.6	Analyze the recent trends in traction

SEMESTER: VIII
Course Code and Name: EE6010 High Voltage Direct Current Transmission

Course Outcomes	Description
C4010.1	Illustrate the advantages and disadvantages of AC transmission and DC transmission

C4010.2	Analyze the operation, characteristics and performance parameters of HVDC converters
C4010.3	Analyze the characteristics of converter and HVDC system controller
C4010.4	Illustrate the reactive power and harmonic control techniques for HVDC system.
C4010.5	Illustrate the operation of DC system model
C4010.6	Analyze the power flow in AC/DC Systems

SEMESTER: VIII
Course Code and Name: EE6009 Power Electronics for Renewable Energy Systems

Course Outcomes	Description
C4010.1	To provide knowledge about engineering aspects of electrical energy generation and utilization and impacts of renewable energy generation on environment.
C4010.2	To provide knowledge about electrical machines for renewable energy conversion.
C4010.3	To design different power converters namely AC to DC, DC to DC and AC to AC converters for renewable energy systems.
C4010.4	To provide knowledge about the stand alone and grid connected renewable energy systems.
C4010.5	To Provide knowledge about hybrid renewable energy systems.
C4010.6	To develop maximum power point tracking algorithms.

SEMESTER: VIII
Course Code and Name: GE6075 Professional Ethics in Engineering

Course Outcomes	Description
C4011.1	Create an awareness on Engineering Ethics and Human Values
C4011.2	Instill Moral , Social Values and Loyalty
C4011.3	Appreciate the rights of others
C4011.4	Apply ethics in society

C4011.5	Discuss the ethical issues related to engineering
C4011.6	Realize the responsibilities and rights in the society

SEMESTER: VIII
Course Code and Name: EE6811 Project Work

Course Outcomes	Description
C4012.1	Classify and Compare the relevant knowledge and skills within the technical area, to a given problem
C4012.2	Independently analyze and discuss inquiries/problems
C4012.3	Analyze the design using modern tools for appropriate solutions
C4012.4	Evaluate and Critically assess the results for design specification
C4012.5	Design and implement the solution with a prototype model and develop further knowledge and competency.
C4012.6	Document and present their work with requirements on structure, format and language.