



Galgotias College of Engineering and Technology

Department of Electrical Engineering

Course Outcomes

1. Course Name: Engineering Mathematics-III (RAS301), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
RAS301.1	Understand the concept of numerical techniques in finding solution of linear system of equations.
RAS301.2	Analyze the problems which are used in engineering and how to solve these problems using different transforms.
RAS301.3	Comprehend the meaning of analytic function, singularities and Laurent series in evaluating real integral.
RAS301.4	Construct, analyze and evaluate the solution of differential equation by using numerical methods.
RAS301.5	Evaluate the root of the algebraic and transcendental equation by using numerical method.
RAS301.6	Analyze the behavior of statistical data by using testing of hypothesis and different probability distributions.

2. Course Name: Environment & Ecology (RAS302), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
RAS302.1	Recall and understanding of the basic concepts of ecology and environment.
RAS302.2	Relate the human need and activities to their impact on environment and way to achieve environment conservation
RAS302.3	Identify the need for finding substitutes and the conservation of scarce natural sources
RAS302.4	Evaluate the applicability and relative importance of different types of energy sources
RAS302.5	Analyze existing environment problems for designing suitable measures to control it
RAS302.6	Extend the educational component of environment to individual, social, national and legal variable for problem solving

3. Course Name: Electrical & Electronics Engineering Materials (REE301), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE301.1	Categorize materials based on structure of dipoles and breakdown strength in various types of dielectrics.
REE301.2	Understand the relationship between microstructure, characterization, electrical and magnetic properties of materials.
REE301.3	Analyze the behavior of different materials under the influence of external magnetic field and factors effecting magnetic properties of materials.
REE301.4	Understand basic properties of semiconductors and integration techniques.
REE301.5	Understand and characterize the materials used for various electrical applications like resistors, rheostats, heaters, etc. and evaluate testing of transformer oil.

4. Course Name: Electrical Measurements & Instrumentation (REE302), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE302.1	Measure various electrical parameters with accuracy, precision and able to get relative error if any.
REE302.2	Design AC and DC bridges for relevant parameter measurement
REE302.3	Study Instrument transformers with their design considerations and testing
REE302.4	Design Signal Generator, frequency counter, CRO and digital IC counter for appropriate measurement.
REE302.5	Application of appropriate passive or active transducers and data acquisition systems for measurement of physical phenomenon

5. Course Name: Basic Signals & Systems (REE303), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE303.1	Represent the various types of signals & systems and perform mathematical operations on them.
REE303.2	Analyze the response of LTI system using Fourier Series and Fourier transform.
REE303.3	Analyze the properties of continuous time signals and system using Laplace transform
REE303.4	Apply the concepts of state- space models to SISO & MIMO systems.
REE303.5	Implement the concepts of Z transform to solve complex engineering problems using difference equations.

6. Course Name: Analog & Digital Electronics (REC309), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REC309.1	To know about different special diodes and illustrate different power devices used in circuit.
REC309.2	Able to understand the working of amplifier and their characteristics.
REC309.3	To know about different types of feedback, and different oscillators and its signal generation.
REC309.4	To know how to minimize the Boolean expression using graphical and algebraic method and also different logic circuits.
REC309.5	To know about different memory storage elements and various analog-digital components used in the system

7. Course Name: Electrical Workshop (REE351), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE351.1	Understand various types of wiring systems, wiring tools, lighting & wiring accessories, wiring estimation & costing, etc.
REE351.2	Understand the fundamental concepts of Electrical and electronics Engineering.

8. Course Name: Electrical Measurements Lab (REE352), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE352.1	Study the importance of calibration of measuring instruments.
REE352.2	Describe the construction and working of different measuring instruments.
REE352.3	Compute the various physical parameters using different sensors.

9. Course Name: Simulation Lab – I (REE353), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE353.1	Understand the basic operations and functions using matlab
REE353.2	Solve different mathematical problems using matlab
REE353.3	Analyze the response of different electrical circuits using simulink

10. Course Name: Electronics Lab (REC359), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REC359.1	Understand and analyze working of different semiconductor devices such diode, transistor, FET and identify its characteristics
REC359.2	Analyze and Design the oscillator circuit (passive elements)
REC359.3	Understand basics of Op-amp ICs, design it for various applications

11. Course Name: Discrete Mathematics (ROE048), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
ROE048.1	Understand the basic concepts of sets, relation and function.
ROE048.2	Analyze the problems which are used in engineering and solve these problems.
ROE048.3	Comprehend the meaning of proposition, logical proposition, tautology, contradiction and Quantifiers.
ROE048.4	Construct, analyze and evaluate the solution of difference equation or recurrence relation by generating functions.
ROE048.5	Evaluate different algebraic structure under different binary operation as group, abelian group, ring and field.
ROE048.6	Analyze the different graphs, trees, binary tree and traversal of tree.

12. Course Name: Universal Human Values & Professional Ethics (RVE401), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
RVE401.1	Understand the need, concept and content of value-education in individual's life and modifies their aspirations for happiness & prosperity.
RVE401.2	Comprehend the term self-exploration and its application for self-evaluation and development.
RVE401.3	Reconstruct the concepts about different values & discriminate between them.
RVE401.4	Analyze the concept of co-existence & evaluate the program to ensure self-regulation.
RVE401.5	Identify the holistic perception of harmony at level of self, family, society, nature and explain it by various examples.
RVE401.6	Apply professional ethics in their future profession & contribute for making a value based society.

13. Course Name: Electromagnetic Field Theory (REC402), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REC402.1	Understand the different coordinate systems and their applications in different EM Fields
REC402.2	Explain the concept of static electric field and different boundary conditions.
REC402.3	Describe the concept of static magnetic field.
REC402.4	Discuss the forces due to magnetic field and magnetic boundary conditions.
REC402.5	Application of Maxwell's equation, wave propagation and Transmission line.

14. Course Name: Power Plant Engineering (REE401), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE401.1	Understand Hydro Electric Power Plant.
REE401.2	Explain Thermal Power Plant.
REE401.3	Describe Nuclear power plant.
REE401.4	Classify different types of Renewable power plants.
REE401.5	Apply the concept of Combined operation of power plants and its economics.

15. Course Name: Electrical Machines –I (REE402), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE402.1	Understand the energy conversion principles and the concept of magnetic system.
REE402.2	Explain the constructional details, characteristics and application of various types of DC generators.
REE402.3	Interpret the performance characteristics of DC motors and their testing.
REE402.4	Explain the working, performance characteristics and testing of 1-phase transformer operating individually or in parallel.
REE402.5	Demonstrate various winding connections of 3-phase transformer and their conversion to multiphase system.

16. Course Name: Network Analysis & Synthesis (REE405), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE405.1	Understand the Importance of Graph Theory in Network Analysis
REE405.2	Analyze AC electrical networks using various network theorems.
REE405.3	Analyze transient and steady state response of first and second order circuit for arbitrary inputs.
REE405.4	Determine the network functions and different parameters pertaining to one port and two port networks.
REE405.5	Design an electrical network using driving point function and describe filters and attenuators.

17. Course Name: Simulation-II Lab (REE451), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE451.1	Design of converter in electrical machines
REE451.2	Demonstration of fuzzy logic toolbox in speed control of dc machine
REE451.3	Application of neural network toolbox on load forecast
REE451.4	Computation of genetic algorithm in least square curve fitting

18. Course Name: Electrical Machines -I Lab (REE452), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE452.1	Analyze and evaluate performance characteristics of DC machine.
REE452.2	Analyze and evaluate performance of transformer.

19. Course Name: Networks Lab (REE453), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE453.1	Apply various network theorems to determine the circuit response.
REE453.2	Analyse R,L, C circuits behavior in time and frequency domain.
REE453.3	Compute two port network parameters.

20. Course Name: Electrical Instrumentation Lab (REE454), Year of Study 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
REE454.1	Understand various transducers and sensors for measuring different types of physical quantities and the working of controllers to find the response of electrical circuits
REE454.2	Simulate the various frequency domain measurements of electrical signal using Spectrum analyzer
REE454.3	Design a circuit for noise reduction in measurement.

21. Course Name: Engineering Economics (NHU501), Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NHU501.1	Understand the basic concepts of Engineering Economics & theory of demand.
NHU501.2	Understand concept of supply and make use of various methods of demand forecasting for estimating demand of any product.
NHU501.3	Explain basic concepts related to production and cost.
NHU501.4	Outline of various market structures.
NHU501.5	Understand nature and structure of Indian economy and basic concepts related to NI, Inflation and business cycle.

22. Course Name: Elements of Power System (NEE501), Year of study: 2017-18

Course outcomes	On completion of this course, the student will be able to
NEE501.1	Apply the knowledge of various kinds of Electrical components for Generation, Transmission and Distribution in a power system.
NEE501.2	Estimate the parameters of transmission line and examine their performance characteristics.
NEE501.3	Solve practical problems of Corona and its interference with communication lines.
NEE501.4	Design the overhead transmission line, insulators and cables.
NEE501.5	Apply the various methods of grounding.

23. Course Name: Power Electronics (NEE502), Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE502.1	Understand the goal of power electronics.
NEE502.2	Interpret the basic application of power electronics devices and switching characterizes of different switching devices like thyristors group, BJT, IGBT etc
NEE502.3	Get the DC output from an AC input for three phase and single system.
NEE502.4	Control the AC output for three phase and single system
NEE502.5	Control the frequency of input and output.

24. Course Name: Control System (NEE503), Year of study: 2017-18

Course Outcome	On completion of this course, the student will be able to -
NEE503.1	Mathematical modelling of physical system to find transfer function
NEE503.2	Analysis of control system using standard test signal
NEE503.3	Design of controller & compensators
NEE503.4	Study of different component of control system
NEE503.5	Analysis of stability of control system in time & frequency domain

25. Course Name: Microprocessor and its application (NEE504), Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE504.1	To study the fundamentals of Microprocessor systems and interfacing
NEE504.2	To learn the fundamentals of 8-bit Microprocessor 8085, instruction set of 8-bit Microprocessor 8085 and assembly language programming for solving problems
NEE504.3	Develop assembly language program using different types of interrupts, subroutines and basic commands of 8-bit Microprocessor 8085.
NEE504.4	To understand the fundamentals and instruction set of 16-bit Microprocessor 8086 and assembly language programming for solving problems in 16-bit Microprocessor 8086 ,
NEE504.5	Develop assembly language program using different types of interrupts, subroutines and basic commands of 16-bit Microprocessor 8086.

26. Course Name: Fundamentals of E.M. Theory (NEC508), Year of study: 2017-18

Course outcomes	On completion of this course, the student will be able to
NEC508.1	Understand the different coordinate systems and their applications in different EM Fields
NEC508.2	Explain the concept of static electric field and different boundary conditions.
NEC508.3	Describe the concept of static magnetic field.
NEC508.4	Discuss the forces due to magnetic field and magnetic boundary conditions.
NEC508.5	Application of Maxwell's equation, wave propagation and Transmission line.

27. Course Name: Power Electronics Lab (NEE551), Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE551.1	Understand various Power Electronics devices & its characteristics SCR, TRIAC, DIAC, IGBT, GTO etc.
NEE551.2	Understand application of Power Electronics devices in Choppers, Inverters and Converters etc. for different load
NEE551.3	Design and simulate 1-3 phase half and full wave rectifiers, chopper inverter etc, using various power electronics devices MATLAB

28. Course Name: Control System Lab (NEE552), Year of study: 2017-18

Course Outcome	On completion of this course, the student will be able to -
NEE552.1	Analyze stability of various control system using time domain stability analysis methods
NEE552.2	Design and simulate various control systems in time /frequency domain using MATLAB

29. Course Name: Microprocessor Lab (NEE553), Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE553.1	Understand assembly language programming on arithmetic and logical operations using 8-bit Microprocessor 8085 experimental Kit
NEE553.2	Understand assembly language programming for solving problems using 16-bit Microprocessor 8086 experimental Kit
NEE553.3	Understand interfacing the devices with microprocessors and its assembly language programming.

30. Course Name: Simulation Based Minor Project (NEE554), Year of study: 2017-18

Course outcomes	On completion of this course, the student will be able to
NEE554.1	Identify the real world problems and develop solution using modern software tools.
NEE554.2	Design or Simulate a prototype of identified problem.
NEE554.3	Write technical reports following professional ethics.

31. Course Name: Power System Analysis (NEE601), Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE601.1	Interpret power system single line diagrams based on their symbolic representation and the concepts of per unit system
NEE601.2	Analyze Power system parameters arising due to occurrences of symmetrical and unsymmetrical faults
NEE601.3	Solve the power flow problems by using Gauss Siedel Method, Newton Raphson's Method, Decoupled and Fast Decoupled Load flow methods
NEE601.4	Analyze the power system stability conditions using equal area criteria and swing equation for transient stability and the criteria for steady state stability
NEE601.5	understand the characteristics of voltage and current as travelling waves under different line terminations

32. Course Name: Switchgear & Protection (NEE602), Year of study: 2017-18

Course Outcome	On completion of this course, the student will be able to -
NEE602.1	Identify the causes and effects of faults in power system and explain the necessity of protection in power system.
NEE602.2	Describe the operation of electromagnetic relays and draw their characteristic curves
NEE602.3	Understand the apparatus protection
NEE602.4	Explain the role and functioning of the static and numerical relays.
NEE602.5	Recognize the location and functioning of circuit breakers.
NEE602.6	Design a protective system for transmission line

33. Course Name: Special Electrical Machines (NEE603) Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE603.1	Study the basic concept of poly phase induction machines
NEE603.2	Understand the basic principle and working of induction generator
NEE603.3	Explain the basic concept of poly phase Stepper Motors
NEE603.4	Analyse the basic principle and working of Permanent Magnet Machines
NEE603.5	Differentiate between different type poly phase Single Phase Commutator Motors

34. Course Name: Power Theft and Energy Management (NEE014), Year of study: 2017-18

Course outcomes	On completion of this course, the student will be able to
NEE014.1	To develop a strategic direction for organizations involved with energy and power.
NEE014.2	Understand the various types of theft in Electro-mechanical & Electronics meters.
NEE014.3	Understand the role of energy management and energy Auditing.
NEE014.4	Understand the performance of Electrical System
NEE014.5	To work on organizations and government departments concerned with promotion, development, and distribution of power.

35. Course Name: Smart Energy Delivery System (NEE024), Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE024.1	Understand the functions of Smart Grid.
NEE024.2	To help students learn about the efficient use of electrical energy
NEE024.3	Students will learn about Smart Grid Technologies used for grid.
NEE024.4	Students will learn about new advanced Technologies application for power storage
NEE024.5	To undertake research, training and organizational work on management of energy and power related issues.

36. Course Name: Industrial Management (NHU 601), Year of study: 2017-18

Course Outcome	On completion of this course, the student will be able to -
NHU601.1	Understand the concept of industrial management.
NHU601.2	Understand the functions & principles of management and basic concept of HRM.
NHU601.3	Understand the process of work study and inventory control techniques
NHU601.4	Apply various quality control techniques for process control & product control.
NHU601.5	Understand basic concepts related to project management and control techniques.

37. Course Name: Power System Lab (NEE651) Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE651.1	To study and analyze the transient and sub-transient reactance of alternator.
NEE651.2	Analyze and calculate the different fault of power system.
NEE651.3	Study and understand the function of different types of relay of power system network.

38. Course Name: Electrical Cad Lab (NEE652), Year of study: 2017-18

Course outcomes	On completion of this course, the student will be able to
NEE652.1	Design single phase transformer and DC-DC convertor
NEE652.2	Design induction motor and PI, PD, PID controllers.
NEE652.3	Design DC shunts motor and DC generator.
NEE652.4	Design field system and armature of alternator
NEE652.5	Design lead-lag compensator

39. Course Name: Minor Project (NEE653), Year of study: 2017-18

Course outcome	On completion of this course, the student will be able to -
NEE653.1	Investigate the emerging problems in electrical engineering and solve them by referring standard journals.

NEE653.2	Illustrate the state of the art technologies in the area of electrical engineering.
NEE653.3	Analyze various technological advancements in the area of machines, control system through software or hardware implementation.
NEE653.4	Analyze various technological advancements in the area of machines, control system through software or hardware implementation.
NEE653.5	Formulate a research paper and write the project report.

40. Course Name: Seminar (NEE654), Year of study: 2017-18

Course Outcome	On completion of this course, the student will be able to -
NEE654.1	Practical implementation of the identified software/hardware module.
NEE654.2	Analyze presentation and writing skills
NEE654.3	Subject knowledge and understanding of the theme.

41. COURSE NAME: ENTREPRENEURSHIP DEVELOPMENT (NOE 071), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NOE071.1	Understand the role and functions of entrepreneur.
NOE071.2	Able to formulate and evaluate the project.
NOE071.3	Understand the concept of NPV & IRR, accountancy, PPC and decision making.
NOE071.4	Determine process quality, understand marketing, IR, advertising, wages & incentive and inventory control.
NOE071.5	Understand various aspects of financial management of a project ,
NOE071.6	Understand legal provisions and assistance provided by various agencies to SSIs

42. COURSE NAME: ELECTRIC DRIVES (NEE701), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE701.1	Understand fundamentals of electric drives and its part.
NEE701.2	Explain dynamics of motor load combination of electric drive.
NEE701.3	Understand electric braking of various machines.
NEE701.4	Apply power electronics for control of DC drives.
NEE701.5	Apply power electronics for control of AC drives.

43. Course Name: Power Station Practice (NEE702),Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE702.1	Analyze the Energy Scenario of India and Operation Of Thermal and Hydro Power Plant
NEE702.2	Compare Working of Nuclear, Gas Turbine, and Diesel Power Plant
NEE702.3	Understand Substation Layout and Analyze Tariff
NEE702.4	Analyze Economic Operation of Power Plant
NEE702.5	Compare Various Non-Conventional Energy Resources Like MHD, Solar, Wind, Geo-Thermal, Tidal and Ocean Thermal Energy.

44. Course Name: Analog & Digital Communication (NEC702A), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEC702A.1	Explain the basic concepts of communication systems and modulation.
NEC702A.2	Evaluate the modulation parameters of frequency modulation with designing concepts of FM transmitter and receiver.
NEC702A.3	Analyse various techniques of phase modulation.
NEC702A.4	Apply different digital modulation techniques.
NEC702A.5	Understand multiplexing and data compression techniques.

45. Course Name: Power System Operation and Control (NEE031), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE031.1	Understand the functioning of power system control centers and the role of computers in real time control power system
NEE031.2	Apply the underlying concepts of unit commitment and on-line economic dispatch in the scheduling of generators
NEE031.3	Evaluate the load frequency control of an isolated power system
NEE031.4	Evaluate the load frequency control of an interconnected power system and the importance of tie-line power flow control
NEE031.5	Apply the various methodologies of voltage and reactive power control
NEE031.6	Understand the objectives of state estimation and the underlying concepts and functioning of FACTS devices

46. Course Name: Electric Drives Lab (NEE751), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE751.1	Demonstrate various speed control tests on dc motors using power electronic converters
NEE751.2	Demonstrate various speed control tests on Induction motors using power electronic converters
NEE751.3	Analyze using MATLAB the speed control of dc motor/induction motor using power electronic converters

47. Course Name: ADC Lab (NEC752B), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEC752B.1	Study and understand various modulation technique and its characteristics
NEC752B.2	Analyze the concept of delta modulation, pulse delta coding for various decoding technique.
NEC752B.3	Analyze the concept of ASK, FSK and PSK with modulation and demodulation process.

48. Course Name: Industrial Training (NEE753), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE753.1	To expose students to the 'real' working environment and get acquainted with the organization structure, business operations and administrative functions.
NEE753.2	To have hands-on experience in the students' related field so that they can relate and reinforce what has been taught at the university.
NEE753.3	To promote cooperation and to develop synergetic collaboration between industry and the university in promoting a knowledgeable society.

49. Course Name: Non-Conventional Energy Resources (NOE 081), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NOE081.1	Distinguish various conventional & non-conventional energy resources and its applications in various fields to minimize energy use in devices and buildings. About Solar cells & solar cell power plant
NOE081.2	Comprehend the overall solar energy and power plants based on it, Their application, performance & limitations.
NOE081.3	Develop an ability to understand resources of Geothermal energy, About MHD and Fuel cells, Power plants based on them, Their performance and limitations.
NOE081.4	Analyze principle of working of Thermo-electrical & thermionic conversion, Comprehensive knowledge of Wind power and its sources, Gain an assessment skill of the relative costs of energy conservation and energy production in various applications.
NOE081.5	Describe the availability & working of bio-mass, OTEC, wave & Tidal wave, Waste Recycling plants. This is also giving an opportunity to students to work as entrepreneurs with small investments or help NGOs for use of non-conventional energy in different forms.

50. Course Name: Electrical & Electronics Engineering Materials (NEE801), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE801.1	Understand the concept of atomic structure, chemical bonding and crystal geometry of engineering materials.
NEE801.2	Understand the concept of conductivity properties and its applications.
NEE801.3	Understand and analyze various properties of semiconductor and its utilization in various semiconductor devices
NEE801.4	Characterize various types of magnetic material based on its characteristics

51. Course Name: Utilization of Electrical Energy & Traction (NEE802), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE802.1	Understand the fundamentals of the embedded system.
NEE802.2	Analyze the embedded Hardware and Interfacing.
NEE802.3	Understand the basic concepts and characteristics of real-time systems
NEE802.4	Explain the signal conditioning and processing with the characterization of embedded system

NEE802.5	Analyse the embedded control and control hierarchy
NEE802.6	Understand the practical considerations, implementation, pros and cons of clock-driven scheduling

52. Course Name: EHV AC & DC Transmission (NEE041), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE041.1	Investigate the need of EHV Transmission and also the recent trends in power transmission system
NEE041.2	Understand the basics of EHV AC transmission
NEE041.3	Assemble the characteristics of EHV testing and design factors of EHV lines.
NEE041.4	Differentiate between types of EHV DC links and investigate the basic principles of DC link.
NEE041.5	Analyze various faults in EHV DC transmission and the concept of MTDC.

53. Course Name: Project (NEE754/ NEE851), Year of study: 2017-18

Course Outcome	Statement (On completion of this course, the student will be able to)
NEE754.1	Identify the particular problem in the field and demonstrate independent learning.
NEE754.2	Plan, design and analyze the particular problem as project
NEE754.3	Demonstrate the usefulness of project in society and understanding of professional ethics and participate in a class or project team.