Department: Electrical Engineering

Course Outcomes

Second Year – Odd Semester

Semester	Course Code	Course Name	Course Outcome
III	BTBS301	Engineering Mathematics III	Understand the properties of Laplace transform and evaluate transform of integral & derivative functions.
			Solve inverse Laplace transform using partial fraction & convolution theorem.
			Determine Fourier Sine & Fourier Cosine integrals.
			Study partial differential equations along with applications
			Study analytic functions, Cauchy Riemann equations, Cauchy integral Formula & Cauchy's residue theorem
III	BTEEC302	Electrical Machines I	Understand and classify different parts of a transformer & understand its operation.
			Analyze 1-Ph and 3-Ph transformers circuits.
			Identify different parts of a DC machine & understand its operation.
			Interpret different testing methods to determine the efficiency of DC machines.
			Analyze the starting and speed control methods of a DC machines.
III	BTEEC303	Electrical and Electronics Measurement	Classify various types of errors is the system and types of electrical measuring instruments
			Explain different types of meters required for electrical quantities.
			Determine unknown variables in the bridge configuration with the help of other known variables.
			Recognize basic measuring instruments used for digital measurements and to explain them.
			Define the term transducers and to classify and explain various types of transducers
III	BTHM 304	Basic Human Rights	Understand importance of human life & Realize the Human rights and Duties.
			Understand about the society, religion, culture of human life.
			Evaluate the social structure and problems.
			Recognize about the freedom, liberty, and democracy of human being.
			Identify about the Human rights law, constitution of India.

III	**BTES305**	**Engineering Material Science**	Study about Crystal structures.
			Understand magnetic material structure.
			Study about conducting and superconducting materials.
			Study about semiconducting materials
			Study dielectric and Nano materials.
III	**BTEEL306**	**Electrical Machine I Lab**	Verify VI characteristics and Phasor diagram of 3 phase transformer.
			Study of construction and working of single phase transformer.
			Study of construction and working of DC machine.
III	**BTEEL307**	**Electrical and Electronics Measurement Lab**	Study of AC bridges
			Construction and working of different meters.
			Study LVDT and transducers.

Second Year-Even Semester

Semester	Course Code	Course Name	Course Outcome
IV	**BTEEC401**	**Network Theory**	Understand the concept of Feedback Amplifier
			Understand the concept of Regulated Power Supply
			Review basic components of electric network.
			Design and develop network equations and their solutions.
IV	**BTEEC402**	**Power System-I**	Apply Laplace theorem for Electric Network Analysis.
			Explain the generation of Electric Energy by different sources
			Discuss the Electrical design aspects of overhead transmission line
			Discuss the Mechanical design aspects of overhead transmission line
IV	**BTEEC403**	**Electrical Machine II**	Understand construction & operating principle of 1 phase transformer.
			Working and construction of 3 phase transformer.
			Understand operating principle of DC generators and DC motors.
			Analyze the operating principles of DC motors.
IV	**BTBS404**	**Analog and Digital Electronics**	Analyze Two port networks.
			Analyze AC circuits.
			Study transistor and op-amp.
			Review basic number system.
			Understand design and characteristics of digital logic gates.

IV	**BTEEPE405**	**Group A (Electronic Devices and Circuits**	Analyze Performance of transmission line
			Describe the basic structure of power system distribution and its components
			Understand the concept of Bipolar Junction Transistor
			Understand the concept of JET and MOSFET
			Understand the concept of Power Amplifiers
IV	**BTEEL406**	**Network Theory Lab**	Compare different techniques in use of digital circuits.
			Apply basic laws, theorems for DC electric network
			Acquire skills of MATLAB for transient response of RC,RL networks
			Analyze resonance in series R,L and C
IV	**BTEEL-407**	**Power System lab-I**	Verify VI characteristics and Phasor diagram of 3 phase transformer.
			Study of construction and working of single phase transformer.
			Study of construction and working of DC machine.
IV	**BTEEL408**	**Electrical Machine-II Lab**	Conduct and understand various performance characteristics of AC machines
			Analyze and understand the behavior of induction machines.
			Calculate and optimize the efficiency of electrical machines.
IV	**BTEEL409**	**Analog and Digital Electronics Lab**	Analyze basic amplifier circuits.
			Review basic and universal gates.
			Understand design & characteristics of digital ICs.