

BRANCH:	EEE /B.Tech II			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	II	SEMESTER:	III
SUBJECT:	Networks analysis and synthesis			SUBJECT CODE:	BEET-305
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEET 305.1	Apply network topology concepts to the formulation and resolution of electrical network issues.				
BEET 305.2	Determine the attributes and traits of network functions and confirm the mathematical limitations for their practical implementation.				
BEET 305.3	Synthesize passive two-port networks filters using standard Foster and Cauer forms.				
BEET 305.4	Apply the concept of Laplace and Fourier transforms in electrical network problems.				
BEET 305.5	To analyze the behaviour of the circuit in different domains.				

BRANCH:	EEE /B.Tech II			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	II	SEMESTER:	III
SUBJECT:	Programming Practices			SUBJECT CODE:	BEEP 306
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEEP 306.1	Demonstrate proficiency in utilizing MATLAB for solving mathematical and engineering problems through programming exercises and projects.				
BEEP 306.2	Apply a comprehensive understanding of MATLAB's syntax, data types, functions, and built-in libraries to independently explore and manipulate data and algorithms.				
BEEP 306.3	Develop problem-solving skills by applying MATLAB such as signal processing and mathematical modeling.				
BEEP 306.4	Utilize MATLAB as a tool for data analysis and simulation in various disciplines such as engineering, science and technology.				
BEEP 306.5	Transfer skills acquired in MATLAB to learn and adapt to other programming languages and environments, fostering lifelong learning and versatility in software development.				

BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	V
SUBJECT:	Applied Instrumentation			SUBJECT CODE:	BEET 503(B)
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEET 503.1	Demonstrate understanding of basic sensor characteristics, including principles of operation, sensitivity, accuracy, and response time.				
BEET 503.2	Classify various types of sensors and actuators based on their principles, functions, and applications across different industries.				
BEET 503.3	Apply mathematical equations relevant to temperature sensors to analyze and solve problems related to temperature measurement and control.				
BEET 503.4	Apply mathematical equations relevant to pressure sensors to analyze and solve problems related to pressure measurement and control.				
BEET 503.5	Apply mathematical equations relevant to level sensors and display devices to analyze and solve problems related to level measurement and visualization.				

BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	V
SUBJECT:	Industrial Interaction			SUBJECT CODE:	BENP-506
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BENP-506.1	Demonstrate competency in the field of electrical engineering through problem identification, formulation and solution.				
BENP-506.2	Develop the ability to work as an individual and in group with the capacity to be a leader or manager as well as an effective team member.				
BENP-506.3	Apply theoretical knowledge gained in the classroom to real-world industrial scenarios, fostering a deeper understanding of practical applications.				
BENP-506.4	Identify potential career paths and opportunities within the industry through networking and mentorship during interactions with professionals.				
BENP-506.5	Generate a report based on the experience and projects carried out with the ability to apply knowledge of Mathematics, Science and Engineering Fundamentals.				
BRANCH:	EEE /B.Tech IV			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	IV	SEMESTER:	VII
SUBJECT:	Switchgear and protection			SUBJECT CODE:	BEET- 701
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				

<b>BEET-701.1</b>	Explain the various faults and protective schemes in the Power systems
<b>BEET-701.2</b>	Summarize the operation of various protection relays in the power systems
<b>BEET-701.3</b>	Infer the need and procedure of apparatus protection in the power protection system.
<b>BEET-701.4</b>	Identify and classify circuit breakers based on design, operating mechanisms, and testing procedures using both direct and indirect methods.
<b>BEET-701.5</b>	Identify and analyze types of faults on transformers and understand the principles and methods of protection for each type of fault.

<b>BRANCH:</b>	<b>EEE /B.Tech IV</b>			<b>SESSION:</b>	<b>2022-23</b>
<b>COURSE:</b>	<b>B.TECH- EEE</b>	<b>YEAR:</b>	<b>IV</b>	<b>SEMESTER:</b>	<b>VII</b>
<b>SUBJECT:</b>	<b>Switchgear and protection lab</b>			<b>SUBJECT CODE:</b>	<b>BEEP- 701</b>

<b>COURSE OUTCOMES (CO)</b>					
<b>CO #</b>	<b>CO STATEMENT</b>				
<b>BEEP-701.1</b>	Analyze protection requirements for different types of electrical equipment and circuits.				
<b>BEEP-701.2</b>	Demonstrate a comprehensive understanding of protection principles in electrical systems, including overcurrent, differential, and earth fault protection.				
<b>BEEP-701.3</b>	Develop the ability to identify and troubleshoot common faults in switchgear systems, including short circuits, insulation failures, and mechanical malfunctions.				
<b>BEEP-701.4</b>	Testing and commissioning various types of switchgear equipment, including circuit breakers, relays, and busbar systems, to ensure proper functioning and reliability.				
<b>BEEP-701.5</b>	Understand the importance of compliance with relevant industry standards and regulations governing switchgear installation, operation, and maintenance.				

<b>BRANCH:</b>	<b>EEE /B.Tech IV</b>			<b>SESSION:</b>	<b>2022-23</b>
<b>COURSE:</b>	<b>B.TECH- EEE</b>	<b>YEAR:</b>	<b>IV</b>	<b>SEMESTER:</b>	<b>VII</b>
<b>SUBJECT:</b>	<b>Utilization of Electrical Energy &amp; Traction</b>			<b>SUBJECT CODE:</b>	<b>BEET 702</b>

<b>COURSE OUTCOMES (CO)</b>					
<b>CO #</b>	<b>CO STATEMENT</b>				
<b>BEET 702.1</b>	Illustrate the working principle of electric power utilization and their applications in real life.				
<b>BEET 702.2</b>	Apply the laws of electrical heating in various industrial and domestic processes				
<b>BEET 702.3</b>	Examine various applications in indoor and outdoor application areas where use of light sources are essential.				
<b>BEET 702.4</b>	Analyze the performance characteristics of electrical machines and traction systems.				
<b>BEET 702.5</b>	Assess the traction system for braking, acceleration and other related parameters, including demand side management.				

<b>BRANCH:</b>	<b>EEE /B.Tech IV</b>			<b>SESSION:</b>	<b>2022-23</b>
<b>COURSE:</b>	<b>B.TECH- EEE</b>	<b>YEAR:</b>	<b>IV</b>	<b>SEMESTER:</b>	<b>VII</b>
<b>SUBJECT:</b>	<b>Utilization of Electrical Energy &amp; Traction Lab</b>			<b>SUBJECT CODE:</b>	<b>BEEP 702</b>

<b>COURSE OUTCOMES (CO)</b>					
<b>CO #</b>	<b>CO STATEMENT</b>				
<b>BEEP 702.1</b>	Conduct performance tests on electrical machines such as motors, generators, transformers, and alternators.				
<b>BEEP 702.2</b>	electrical systems and traction setups.				
<b>BEEP 702.3</b>	Analyze energy efficiency measures and power quality issues in electrical systems applications				
<b>BEEP 702.4</b>	Prepare a report of specifications of various electric welding machines.				
<b>BEEP 702.5</b>	Identify the different lightening accessories required for various types of electric lamps.				

<b>BRANCH:</b>	<b>EEE /B.Tech II</b>			<b>SESSION:</b>	<b>2022-23</b>
<b>COURSE:</b>	<b>B.TECH</b>	<b>YEAR:</b>	<b>II</b>	<b>SEMESTER:</b>	<b>III</b>
<b>SUBJECT:</b>	<b>Electronic measurement &amp; instrumentation</b>			<b>SUBJECT CODE:</b>	<b>BEET-301</b>

<b>COURSE OUTCOMES (CO)</b>					
<b>CO #</b>	<b>CO STATEMENT</b>				
<b>BEET301.1</b>	Analyze the performance characteristics of each instrument.				
<b>BEET301.2</b>	Demonstrate basic meters such as voltmeters and ammeters and Distinguish various types of bridge based on quality factor				
<b>BEET301.3</b>	Apply the complete knowledge of various electronics instruments/transducers to measure the physical quantities in the field				
<b>BEET301.4</b>	Compute the basic features of oscilloscope and distinguish between various types of oscilloscopes				
<b>BEET301.5</b>	Classify the many kinds of signal analyzers				

BRANCH:	EEE /B.Tech II			SESSION:	2022-23
COURSE:	B.TECH	YEAR:	II	SEMESTER:	III
SUBJECT:	Electronic measurement & instrumentation Lab			SUBJECT CODE:	BEEP-301
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEEP301.1	Identify different measuring instruments for the measurement of electrical and non-electrical parameters.				
BEEP301.2	Examine AC bridges for the measurement of inductance, capacitance and frequency.				
BEEP301.3	Demononstate the complete knowledge of various electronics instruments/transducers to measure the physical quantities in				
BEEP301.4	Compute the basic features of oscilloscope and distinguish between various types of oscilloscopes				
BEEP301.5	Analyze the many kinds of signal analyzers				

BRANCH:	EEE /B.Tech			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	II	SEMESTER:	III
SUBJECT:	Electronics Devices			SUBJECT CODE:	BECT-304
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BECT 304.1	Illustrate various characterstics of a semiconductor				
BECT 304.2	Apply the laws of semiconductor physics to solve the problems				
BECT 304.3	Examine the various application of diode				
BECT 304.4	Analyze various transistor configuration				
BECT 304.5	Assess various parameter and characterstics of Field effect transistor				

BRANCH:	EEE /B.Tech			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	II	SEMESTER:	III
SUBJECT:	Electronics Devices Lab			SUBJECT CODE:	BECP-304
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BECP 304.1	Examine the various lab equipment and components needed in electronics				
BECP 304.2	Conduct performance characteristics curve of various diode				
BECP 304.3	Analyze the input and output characteristics and H parameter of BJT				
BECP 304.4	Identify Magnitude vs frequency curve and measure bandwidth in FET				
BECP 304.5	Implement various electronics circuit in breadboard				

BRANCH:	EEE /B.Tech			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	V
SUBJECT:	Electromagnetic Field Theory			SUBJECT CODE:	BEET-505
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEET 505.1	Understand the depth of static and time varying electromagnetic field as governed by Maxwell's equations.				
BEET 505.2	Illustrate the applications of strokes and divergence theorem				
BEET 505.3	Examine the characteristics of guided waves between parallel plane and rectangular waveguide				
BEET 505.4	Analyze uniform plane wave propagation in different medium				
BEET 505.5	Apply smith chart for solution of transmission line problems and impedance matching				

BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	V
SUBJECT:	Industrial Electronics			SUBJECT CODE:	BOET 504 C
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BOET 504 C.1	Evaluate the performance characteristics of power supplies and assess their suitability for specific applications.				
BOET 504 C.2	and characteristics of linear and non linear devices. Apply the laws of electrical heating in various industrial and domestic processes				
BOET 504 C.3	Compare performance of various power semiconductor devices, passive components and switching circuits.				
BOET 504 C.4	Analyze the steady state and small signal AC response of simple electronic circuits containing diodes, transistors, and operational amplifiers				
BOET 504 C.5	Create efficient and reliable control sequences for industrial processes.				
BRANCH:	EEE /B.Tech			SESSION:	2022-23
COURSE:	B.TECH	YEAR:	DEPARTMENT	SEMESTER:	5
SUBJECT:	Electrical Machine- II			SUBJECT CODE:	BEET-501
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				

BEET501.1	Analyze the behaviour of DC & AC motor models for different applications
BEET501.2	Evaluate the characteristics of different types of DC & AC motors for designing suitable controllers.
BEET501.3	Apply the reference frame theory of AC machines to model the Synchronous machines
BEET501.4	Evaluate the steady state and transient behaviour of induction machines to propose the suitability of drives for different industrial applications
BEET501.5	Evaluate the steady state and transient behaviour of AC & DC machines to propose the suitability of drives for different industrial applications

BRANCH:	EEE /B.Tech			SESSION:	2022-23
COURSE:	B.TECH	YEAR:	DEPARTMENT	SEMESTER:	5
SUBJECT:	Electrical Machine- II lab			SUBJECT CODE:	BEEP-501

COURSE OUTCOMES (CO)	
CO #	CO STATEMENT
BEEP501.1	Assess the performance of three phase and single phase induction motors .
BEEP501.2	Examine the speed of three phase induction motor and synchronous motor
BEEP501.3	Pre determine the regulation of three phase alternator by various methods.
BEEP501.4	Find $X_d/X_q$ ratio of alternator and assess the performance of three phase synchronous motor of drives for different industrial applications
BEEP501.5	Evaluate the steady state and transient behaviour of AC machines to propose the suitability of drives for different industrial applications

BRANCH:	EEE /B.Tech IV			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	IV	SEMESTER:	VII
SUBJECT:	Non Conventional Energy Resources			SUBJECT CODE:	BEET-703 (B)

COURSE OUTCOMES (CO)	
CO #	CO STATEMENT
BEET 703(B).1	Analyze the fuel cell's performance indices.
BEET 703(B).2	Explore the many processes involved in producing and storing hydrogen.
BEET 703(B).3	Calculate the MHD system's economics and power output.
BEET 703(B).4	Estimate the OTEC system's usefulness for generating power in various scenarios.
BEET 703(B).5	Evaluate the amount of power produced using different non-conventional energy sources.

BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	V
SUBJECT:	Power System 2			SUBJECT CODE:	BEET 502

COURSE OUTCOMES (CO)	
CO #	CO STATEMENT
BEET 502.1	implement the graph theory approach for formulation of Ybus and Zbus and application of p.u. system and symmetric components
BEET 502.2	Analyze symmetrical and unsymmetrical faults using symmetrical component theory.
BEET 502.3	Perform steady state power flow analysis using Gauss-Seidel, Newton-Raphson and fast decoupled iterative methods.
BEET 502.4	Compare the stability transient and Steady state stability to judge the power system's ability to maintain stability under different operating conditions.
BEET 502.5	Analyze the propagation of waves in power systems including transmission line and cable analysis to protect the system in better way.

BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	V
SUBJECT:	Power System 2 Lab			SUBJECT CODE:	BEEP 502

COURSE OUTCOMES (CO)	
CO #	CO STATEMENT
BEEP 502.1	Simulate the model of overhead power systems in laboratory.
BEEP 502.2	Calculate Z and Y matrices for any given power networks
BEEP 502.3	Perform various analysis on any given power system using appropriate tools and techniques
BEEP 502.4	Compare different scenarios for economic dispatch of power
BEEP 502.5	Deduce the effectiveness of LFC on single and double area criteria

ACULTY NAME:		MRS.SUSHMA CHAUDHARY			
BRANCH:	EEE/B.Tech /7TH			SESSION:	2022-23
COURSE:	B.TECH	YEAR:	3RD	SEMESTER:	7TH
SUBJECT:	PEN SOURCE SW LAB			UBJECT CODI	BEEP-705
COURSE OUTCOMES (CO)					
CO #	TATEMENT				
BEEP705.1	Use circuit design software like for, data analysis and simulation.				

BEEP705.2	Connect hardware platforms to sensors, actuators, and other hardware parts for A practical purpose.
BEEP705.3	Foster teamwork, communication skills, and exposure to real-world engineering challenges.
BEEP705.4	Navigate and ensure compliance with relevant licenses and promoting ethical practices in project Development.
BEE705.5	Contribute to the documentation and dissemination of open-source projects to facilitate knowledge sharing and collaboration.

BRANCH:	EEE /B.Tech			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	II	SEMESTER:	IV
SUBJECT:	Signal & System			SUBJECT CODE:	BECT-402

#### COURSE OUTCOMES (CO)

CO #	CO STATEMENT
BECT 402.1	Understand the basics of continuous time and discrete time signals and systems.
BECT 402.2	Explain state space analysis of LTI system.
BECT 402.3	Comprehend the effects of sampling on a continuous time signal
BECT 402.4	Calculate Fourier series and Fourier transform of continuous and discrete time signals.
BECT 402.5	Analyze signal systems properties like stability and causality using Laplace and Z transforms

BRANCH:	EEE /B.Tech			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	VI
SUBJECT:	Digital Signal Processing			SUBJECT CODE:	BECT-603

#### COURSE OUTCOMES (CO)

CO #	CO STATEMENT
BECT 603.1	Understand the concept of signals and systems along with frequency analysis
BECT 603.2	Explain the concept of multi rate signal processing.
BECT 603.3	Apply FFT Algorithm to compute DFT of discrete signals.
BECT 603.4	Illustrate the effect of finite register length in FIR digital filters.
BECT 603.5	Analyze the frequency characteristics of IIR and FIR digital filters for given requirements

BRANCH:	EEE /B.Tech			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	VI
SUBJECT:	Digital Signal Processing Lab			SUBJECT CODE:	BECT-603

#### COURSE OUTCOMES (CO)

CO #	CO STATEMENT
BECT 603.1	Understand the mathematical operation on discrete signals.
BECT 603.2	Sketch the magnitude and phase response of DFT, Inverse DFT and FFT of discrete time signals
BECT 603.3	Calculate linear and Circular convolution of discrete sequences
BECT 603.4	Illustrate the effect of finite register length in FIR digital filters.
BECT 603.5	Analyze the frequency characteristics of IIR and FIR digital filters for given requirements

BRANCH:	EEE /B.Tech IV			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	IV	SEMESTER:	VIII
SUBJECT:	Advance control Systems			SUBJECT CODE:	BEET- 801

#### COURSE OUTCOMES (CO)

CO #	CO STATEMENT
BEET-801.1	Analyzing nonlinear system dynamics, visualizing phase portraits, and interpreting describing functions.
BEET-801.2	Applying Lyapunov stability theory to analyze system stability, designing optimal control strategies, and optimizing system performance.
BEET-801.3	Formulating discrete-time models, understanding difference equations, state-space representation, and z-transform techniques.
BEET-801.4	Evaluating transient and steady-state responses, assessing system stability, and analyzing sensitivity of linear control systems.
BEET-801.5	Designing state feedback controllers, placing poles for desired system behavior, implementing state observers, and designing output feedback controllers for improved system performance.

BRANCH:	EEE /B.Tech IV			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	IV	SEMESTER:	VIII
SUBJECT:	Advance control Systems LAB			SUBJECT CODE:	BEEP- 801

#### COURSE OUTCOMES (CO)

CO #	CO STATEMENT
BEEP-801.1	Model and analyze a control system in the form of transfer function, in MATLAB, considering it's zeros, poles and gain.
BEEP-801.2	Analyze the time and frequency responses of SISO and MIMO linear time invariant systems via various plots, for assessing the margins and stability of open loop as well as closed loop control systems.
BEEP-801.3	Demonstrate the Time Domain and frequency domain response analysis of power-sector based 'first and second order control systems' for assessing the system stability and control action.
BEEP-801.4	Design lead-lag compensator for the 'higher order (third order and above) unstable control systems' for providing the necessary compensation in order to enhance the system response and stability.

BEEP-801.5		Design P, PI as well as PID controllers for continuous process control and tuning of 'temperature, level and pressure based' closed loop control systems.				
BRANCH:		EEE /B.Tech III			SESSION:	2022-23
COURSE:		B.TECH- EEE	YEAR:	III	SEMESTER:	VI
SUBJECT:		Minor Project I			SUBJECT CODE:	BEEP-607
COURSE OUTCOMES (CO)						
CO #		CO STATEMENT				
BEEP-607.1		Develop a structured thought process for preparing and delivering presentations effectively.				
BEEP-607.2		Enhance language proficiency and communication skills to convey ideas clearly and effectively.				
BEEP-607.3		Foster an understanding of diverse viewpoints, promoting collaboration and teamwork.				
BEEP-607.4		Researching and staying informed about emerging technologies, regulations, and innovations to adapt and respond to industry changes effectively.				
BEEP-607.5		Cultivate critical thinking skills and problem-solving abilities to address challenges in power systems engineering.				

BRANCH:	EEE /B.Tech IV			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	IV	SEMESTER:	VIII
SUBJECT:	Electric Drives & its Applications			SUBJECT CODE:	BEET 802
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEET 802.1	Differentiate electric drives systems based on nature of loads, control objectives, performance and reliability.				
BEET 802.2	Analyze load characteristics, torque-speed requirements, duty cycles, and environmental conditions to select suitable motors and drives.				
BEET 802.3	Illustrate the concept of braking to distinguish types of machines in electric drives				
BEET 802.4	Develop capability to choose a suitable electrical machine and Power Electronic Converter involving load estimation and load cycle consideration.				
BEET 802.5	Design the frequency controlled converters used motor drives utilising phase controlled converters.				

BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	VI
SUBJECT:	POWER ELECTRONICS			SUBJECT CODE:	BEET 601
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEET 601.1	Apply basic semiconductor physics to properties of power devices, and combine circuit mathematics and characteristics of linear and non linear devices. Apply the laws of electrical heating in various industrial and domestic processes				
BEET 601.2	Compare performance of various power semiconductor devices, passive components and switching circuits.				
BEET 601.3	Analyze power converter circuits and learn to select suitable power electronic devices by assessing the requirements of application fields				
BEET 601.4	Formulate typical alternative solutions,using suitable power converters to control Electrical Motors and other industry apparatus				
BEET 601.5	Design rectifiers, inverters, choppers, and cycloconverters based on given specifications and requirements.				

BRANCH:	EEE /B.Tech II			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	II	SEMESTER:	IV
SUBJECT:	CONTROL SYSTEM			SUBJECT CODE:	BEET 405
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEET 405.1	Categorize different types of system and identify a set of algebraic equations to represent and model a complicated system into a more simplified form				
BEET 405.2	Apply standard test signals to a system to determine their characteristics.				



BEET 405.3	Examine the system behaviour using various stability analysis techniques.									
BEET 405.4	Analyze the stability of various linear time invariant systems using frequency response methods.									
BEET 405.5	Identify the needs of different types of controllers and compensator to ascertain the required dynamic response from the system.									
BRANCH:		EEE /B.Tech IV						SESSION:		2022-23
COURSE:		B.TECH- EEE		YEAR:		IV		SEMESTER:		VIII
SUBJECT:		Electric Drives & its Applications Lab						SUBJECT CODE:		BEEP 802
COURSE OUTCOMES (CO)										
CO #		CO STATEMENT								
BEEP 802.1		Analyze the four quadrant operation of motor drives.								
BEEP 802.2		Examine the operation of three phase fully and half controlled converters for different types of loads experimentally.								
BEEP 802.3		Develop testing and experimental procedures applying basic knowledge in electronics, electrical circuit analysis, electrical m								
BEEP 802.4		Illustrate operation and analysis of different converters with reference to control strategy.								
BEEP 802.5		Evaluate the performance characteristics of electrical machine drives.								
BRANCH:		EEE /B.Tech III						SESSION:		2022-23
COURSE:		B.TECH- EEE		YEAR:		III		SEMESTER:		VI
SUBJECT:		POWER ELECTRONICS LAB						SUBJECT CODE:		BEEP 601
COURSE OUTCOMES (CO)										
CO #		CO STATEMENT								
BEEP 601.1		Analyze the power characteristics of various semiconductor devices.								
BEEP 601.2		Evaluate the performance of AC-AC converter with various loads and operations.								
BEEP 601.3		Compare and contrast various power semiconductor devices according to their applications.								
BEEP 601.4		Analyze phase controlled converter circuit with different load conditions.								
BEEP 601.5		Construct power semiconductor circuits for industrial applications.								
BRANCH:		EEE /B.Tech						SESSION:		2022-23
COURSE:		B.TECH		YEAR: 2		EEE		SEMESTER:		4
SUBJECT:		Electrical Machine- 1						SUBJECT CODE:		BEET-402
COURSE OUTCOMES (CO)										
CO #		CO STATEMENT								
BEET402.1		Analyse theoretically, the performance characteristics for different electrical machines .								
BEET402.2		Examine the testing of different electrical machines so as to identify their applicability in different practical situations.								
BEET402.3		Illustrate the constructional details and principle of operation of DC & AC machines.								
BEET402.4		Apply the knowledge about starting and speed control, testing and applications of dc motors.								
BEET402.5		Illustrate the construction, operation, and characteristics of commonly used dc machines.								
BRANCH:		EEE /B.Tech						SESSION:		2022-23
COURSE:		B.TECH		YEAR: 2		EEE		SEMESTER:		4
SUBJECT:		Electrical Machine- II						SUBJECT CODE:		BEET-402
COURSE OUTCOMES (CO)										
CO #		CO STATEMENT								
BEEP402.1		Developing the skill of operating different electrical machines and its control techniques								
BEEP402.2		Performing different tests on various DC & AC machines.								
BEEP402.3		Acquiring understanding of DC & AC machine parameters.								
BEEP402.4		Determine the parameters of equivalent circuit of single phase transformer and three phase transformer. performance								
BEEP402.5		Providing a foundational understanding of electrical numbers and practical expertise for DC circuit analysis								

BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	VI
SUBJECT:	Energy Management & SCADA			SUBJECT CODE:	BEET-605 (C)
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEET-605 (C).1	Apply the principles of PLC, DCS, and SCADA to industrial automation.				
BEET-605 (C).2	Identify the hardware and software requirements of SCADA and PLC.				
BEET-605 (C).3	Demonstrate the SCADA principle in various applications.				
BEET-605 (C).4	Simulate the safety-instrumented systems as per safety regulations.				
BEET-605 (C).5	Demonstrate the SCADA principle in various applications.				
BRANCH:	EEE /B.Tech VI			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	IV	SEMESTER:	VIII
SUBJECT:	Bio-Medical Instrumentation			SUBJECT CODE:	BEET 803 (B)
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BEET 703(B).1	Identify the biological system's physiology.				
BEET 703(B).2	Measure physiological and medical data.				
BEET 703(B).3	Express their knowledge on the use of electronics in the field of therapy and diagnosis.				
BEET 703(B).4	Compare the applications and setup of sensors in the medical field.				
BEET 703(B).5	Evaluate ECG and EEG design parameters.				
BRANCH:	EEE			SESSION:	2022-23
COURSE:	B.TECH	YEAR:	II	SEMESTER:	IV
SUBJECT:	Digital Electronics			SUBJECT CODE:	BECT-401
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BECT401.1	Comprehend and analyze digital logic circuit ,binary codes,number system and different types of minimization methods.				
BECT401.2	Analyze the characteristics of logic families and semiconductor memories.Compare their performance in terms of performance metric				
BECT401.3	Analyze digital systems for their performance, timing characteristics, and hazards.				
BECT401.4	Design & implement combinational logic circuits for specific functions, such as adders, subtractors, multiplexers, and decoders.				
BECT401.5	Design & implement sequential logic circuits, including flip-flops, counters, registers, and state machines.				
BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	VI
SUBJECT:	Microprocessor & Embedded systems			SUBJECT CODE:	BECT 602
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BECT 602.1	Apply microprocessor techniques to solve problems.				
BECT 602.2	Analyze 8086 microprocessor for a given problem.				
BECT 602.3	Examine 8085 and 8086 microprocessor using assembly language programs.				
BECT 602.4	Implement assembly language program in 8086 microprocessor.				
BECT 602.5	Analyze interfacing of 8086 microprocessor				
COURSE OUTCOMES (CO)					
BRANCH:	EEE /B.Tech III			SESSION:	2022-23
COURSE:	B.TECH- EEE	YEAR:	III	SEMESTER:	VI
SUBJECT:	Microprocessor & Embedded system Lab			SUBJECT CODE:	BECP-602
COURSE OUTCOMES (CO)					
CO #	CO STATEMENT				
BECP 602.1	Apply microprocessor techniques to solve problems.				
BECP 602.2	Analyze 8086 microprocessor for a given problem.				
BECP 602.3	Examine 8085 and 8086 microprocessor using assembly language programs.				
BECP 602.4	Implement assembly language program in 8086 microprocessor.				
BECP 602.5	Analyze interfacing of 8086 microprocessor				