

**D.N.R.COLLEGE OF ENGINEERING & TECHNOLOGY**

Balusumudi Bhimavaram-2

(Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada)

(Accredited with B⁺⁺ Grade by NAAC)Ph: 08816221238 Email: dncet@gmail.com website: <https://dncet.org>

Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	EEE	AY	2021-2022
Course Name:	M-IV	Class/Sem	EEE II/I
Faculty Name:	N.U.B.Varma	Regulation	R20

Course Outcomes

After completion of this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2211.1	Apply Cauchy-Riemann equations to complex functions in order to determine whether a given continuous function is analytic	Apply
C2211.2	Evaluate the differentiation and integration of complex functions used in engineering problem	Evaluate
C2211.3	Analyze the Cauchy residue theorem to evaluate certain integrals	Analyze
C2211.4	Apply discrete and continuous probability distributions	Understand
C2211.5	design the components of a classical hypothesis test	Evaluate
C2211.6	Analyze the statistical inferential methods based on small and large sampling tests	Analyze

#knowledge; Remember; Understand; Apply; Analyze; Evaluate; Create

Faculty signature

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	EEE	AY	2021-2022
Course Name:	EDC	Class/Sem	EEE II/I
Faculty Name:	G.Rajeswari	Regulation	R20

Course Outcomes

After completion of this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2212.1	Understand the basic concepts of semiconductor physics.	Understand
C2212.2	Understand the formation of p-n junction and how it can be used as a p-n junction as diode in different modes of operation.	Understand
C2212.3	Analyze working principle of rectifiers with and without filters with relevant expressions and necessary comparisons.	Analyze
C2212.4	Understand the construction, principle of operation of transistors, BJT and FET with their V-I characteristics in different configurations.	Understand
C2212.5	Understand transistor biasing, various biasing techniques for BJT and FET and stabilization concepts with necessary expressions.	Evaluate
C2212.6	Analysis of small signal low frequency transistor amplifier circuits using BJT and FET in different configuration	Analyze

#knowledge; Remember; Understand; Apply; Analyze; Evaluate; Create

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Course Outcomes (COs)

Program Name:	B.Tech in Electrical And Electronics Engineering	AY	2021-2022
Course Name:	ELECTRICAL CIRCUIT ANALYSIS-II	Class/Sem	II-I
Faculty Name:	T.Venkateswara Rao	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C212.1	Understand the concepts of Balanced three phase circuits	Understand
C212.2	Understand the concepts of Unbalanced three phase circuits	Understand
C212.3	Analyse the transient behavior of electrical networks with DC excitation.	Analyse
C212.4	Analyse the transient behavior of electrical networks with AC excitation.	Analyse
C212.5	Estimate the various parameters of two port networks.	Evaluate
C212.6	Understand the significance of filters in electrical networks.	Understand

#Remember; Understand; Apply; Analyse; Evaluate; Create

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	EEE	AY	2021-2022
Course Name:	DC Machines & Transformers	Class/Sem	EEE II/I
Faculty Name:	T.Venkateswara Rao	Regulation	R20


Course Outcomes

After completion of this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C221.1	Analyze the concepts of balanced and unbalanced three-phase circuits	Analyse
C221.2	Analyze transient behavior of electrical networks with DC excitations.	Analyse
C221.3	Analyze the transient behavior of electrical networks with AC excitations.	Apply
C221.4	Analyze different circuit parameters by using Network theorems	Analyse
C221.5	Evaluate various parameters of a two port network.	Evaluate
C221.6	Analyze the significance of filters in electrical networks	Apply

#knowledge; Remember; Understand; Apply; Analyse; Evaluate; Create

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Course Outcomes (COs)

Program Name:	B.Tech Electrical & Electronics Engineering	AY	2021-22
Course Name:	Electro Magnetic Fields	Class / Sem	II/I
Faculty Name:	D. Joseph Kumar	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
CO2215.1	Determine electric fields and potentials using Gauss's law or solving Laplace's or Poisson's equations, for various electric charge distributions.	Apply
CO2215.2	Design the capacitance and energy stored in dielectrics.	Create
CO2215.3	Evaluate the magnetic field intensity due to current, the application of Ampere's law and the Maxwell's second and third equations.	Evaluate
CO2215.4	Evaluate magnetic forces and torque produced by currents in magnetic field	Evaluate
CO2215.5	Illustrate self and mutual inductances and the energy stored in the magnetic field.	Analyse
CO2215.6	Calculate induced EMF; understand the concepts of displacement current and Poynting vector.	Apply

Remember; Understand; Apply; Analyze; Evaluate; Create

Faculty signature



DNR College of Engineering & Technology :: Bhimavaram

Department of Electrical & Electronics Engineering

A.Y: 2021-22

ELECTRICAL CIRCUITS LAB

II B.Tech - I Semester – EEE

COURSE OUTCOMES

Course Name: Electrical Circuits Lab

After completion of the course the student will be able to

CO Number	CO Statement	Taxonomy
C2216.1	Apply various theorems	Apply
C2216.2	Determination of self and mutual inductances	Evaluate
C2216.3	Two port parameters of a given electric circuits	Apply
C2216.4	Draw locus diagrams	Apply
C2216.5	Draw Waveforms and phasor diagrams for lagging and leading networks	Analyze
C2216.6	Determine the parameters of choke coil.	Evaluate

Faculty in-charge



DNR College of Engineering & Technology :: Bhimavaram

Department of Electrical & Electronics Engineering

A.Y: 2021-22

DC MACHINES & TRANSFORMERS LAB

II B.Tech - I Semester – EEE

COURSE OUTCOMES

Course Name: DC Machines & Transformers Lab

CO Number	CO Statement	Taxonomy
C2217.1	Determine and predetermine the performance of DC machines and Transformers.	Analyze
C2217.2	Determine and predetermine the performance of Transformers.	Evaluate
C2217.3	Control the speed of DC motor by using various methods.	Apply
C2217.4	Obtain three phase to two phase transformation.	Apply
C2217.5	Determine constant losses of of DC Machine.	Analyze
C2217.6	Separate core losses of Transformer.	Evaluate

Faculty in-charge



DNR College of Engineering & Technology :: Bhimavaram

Department of Electrical & Electronics Engineering

A.Y: 2021-22

ELECTRONIC DEVICES & CIRCUITS LAB

II B.Tech - I Semester – EEE

COURSE OUTCOMES

Course Name: DC Machines & Transformers Lab

CO Number	CO Statement	Taxonomy
C2218.1	Analyze the characteristics of diodes, transistors and other devices	Analyze
C2218.2	Design and implement the rectifier circuits, SCR and UJT in the hardware circuits	Create
C2218.3	Design the biasing and amplifiers of BJT and FET amplifiers	Create
C2218.4	Measure electrical quantities using CRO in the experimentation	Evaluate
C2218.5	Analyze the characteristics of diodes, transistors and other devices	Analyze
C2218.6	Design and implement the rectifier circuits, SCR and UJT in the hardware circuits.	Evaluate

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Electrical & Electronics Engineering

SYSTEMS LAB

A.Y: 2021-22

SKILL ORIENTED COURSE

DESIGN OF ELECTRICAL CIRCUITS USING ENGINEERING SOFTWARE TOOLS LAB

II B.Tech - I Semester – EEE

COURSE OUTCOMES

Course Name: Skill Oriented Course Lab

CO Number	CO Statement	Taxonomy
C2219.1	write the MATLAB programs to simulate the electrical circuit problems	Analyze
C2219.2	Simulate various circuits for electrical parameters	Apply
C2219.3	Simulate various wave form for determination of wave form parameters	Apply
C2219.4	Simulate RLC series and resonance circuits for resonant parameters	Apply
C2219.5	Simulate magnetic circuits for determination of self and mutual inductances	Apply
C2219.6	Simulate RLC parallel resonance circuits for resonant parameters	Apply

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B. Tech (EEE)	AY	2021-22
Course Name:	Python Programming	Class/Sem	EEE II/II
Faculty Name:	B. Jyothi Priyanka	Regulation	R20

Course Outcomes

After completing this course the student will be able to:

CO Number	CO Statement	Taxonomy
C2221.1	Describe the Python language syntax including control statements and functions to write programs for a wide variety of problems in mathematics, science, and games.	Understand
C2221.2	Examine the core data structures like lists, dictionaries, tuples and sets in Python to store, process and sort the data.	Apply
C2221.3	Develop, run and manipulate Python Programs using File Operations	Remember
C2221.4	Interpret the concepts of OOPS by Using Python	Apply
C2221.5	Analyze and recover runtime exceptions that arise in the applications.	Analyze
C2221.6	Write the techniques in object-oriented programming to solve real world problems.	Apply

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Electrical & Electronics Engineering

Course Outcomes (COs)

ProgramName:	B. Tech(CSE)	AY	2021-22
CourseName:	DE	Class/Sem	EEE-II/II
FacultyName:	M.U. Suseela	Regulation	R20

Course Outcomes

After completing this course the student will be able to:

CO Number	CO Statement	Taxonomy
C2222.1	Classify different number systems and apply to generate various codes	Understand
C2222.2	Use the concept of Boolean algebra in minimization of switching functions	Apply
C2222.3.	Design different types of combinational logic circuits.	Remember
C2222.4	Apply knowledge of flip-flops in designing of Registers and counters	Apply
C2222.5	Operate and design methodology for synchronous sequential circuits	Analyze
C2222.6	Operate and design methodology for algorithmic state machines	Apply

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Electrical and Electronics Engineering Department

Course Outcomes (COs)

Program Name:	B.Tech - EE	AY	2021-2022
Course Name:	POWER SYSTEMS - I	Class / Sem	II/ II
Faculty Name:	G. Saibaba	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Bloom Taxonomy
C2222.1	Understand the principle of operation of different components of a thermal power stations.	L2- Understanding
C2222.2	Understand the principle of operation of different components of a Nuclear power stations.	L2 - Understanding
C2222.3	To study the constructional and operation of different components of an Air insulated sub stations.	L1- Remembering
C2222.4	To study the construction of Gas Insulated substations.	L1- Remembering
C2222.5	Understand the construction of underground cables.	L2 - Understanding
C2222.6	Evaluating the economic aspects of power generation and tariffs.	L5- Evaluating

Remember; Understand; Apply; Analzse; Evaluate; Create

BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3- Applying, 4-Analyzing, 5- Evaluating, 6- Creating)

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2021-2022
Course Name:	INDUCTION & SYNCHRONOUS MACHINES	Class/ Sem	II-II
Faculty Name:	T. Venkateswara Rao	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2224.1	Analyse the operation and performance of three phase induction motor.	Analyze
C2224.2	Analyze the torque-speed relation, performance of induction motor and induction generator.	Analyze
C2224.3	Analyze the torque-speed relation, performance of induction generator.	Analyze
C2224.4	Implement the starting of single phase induction motors.	Apply
C2224.5	Predetermine the regulation of synchronous generators.	Evaluate
C2224.6	Apply the methods of starting and correction of power factor with synchronous motor.	Apply

#Remember; Understand; Apply; Analyze; Evaluate; Create

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2021-2022
Course Name:	MEFA	Class/ Sem	II-II
Faculty Name:	B.Vamsidhar	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2225.1	The Learner is equipped with the knowledge of estimating the Demand and demand elasticities for a product.	Analyze
C2225.2	The knowledge of understanding of the Input-Output-Cost relationships and estimation of the least cost combination of inputs.	Analyze
C2225.3	The pupil is also ready to understand the nature of different markets and Price Output determination under various market conditions and also to have the knowledge of different Business Units..	Analyze
C2225.4	The Learner is able to prepare Financial Statements and the usage of various Accounting tools for Analysis.	Apply
C2225.5	The Learner can able to evaluate various investment project proposals with the help of capital budgeting techniques for decision making.	Evaluate
C2225.6	The Learner can able to evaluate various investment project proposals with the help of capital budgeting techniques for decision making.☐	Understand

#Remember; Understand; Apply; Analyze; Evaluate; Create

Faculty signature:



DNR College of Engineering & Technology :: Bhimavaram

Department of Electrical & Electronics Engineering

PROJECT LAB

A.Y: 2021-22

PYTHON PROGRAMMING LAB

II B.Tech - II Semester – EEE

COURSE OUTCOMES

Course Name: Python Programming Lab

S.No.	CO Statement	Taxonomy
C2216.1	Write, Test and Debug Python Programs	Analyze
C2216.2	Use Conditionals and Loops for Python Programs	Create
C2216.3	Use functions and represent Compound data using Lists	Create
C2216.4	Use functions and represent Compound data using Tuples	Evaluate
C2216.5	Use functions and represent Compound data using Dictionaries	Analyze
C2216.6	Use various applications using python	Evaluate

Faculty signature:



DNR College of Engineering & Technology :: Bhimavaram

Department of Electrical & Electronics Engineering

ELECTICAL MACHINES LAB

A.Y: 2021-22

INDUCTION & SYNCHRONOUS MACHINES LAB

II B.Tech - II Semester – EEE

COURSE OUTCOMES

Course Name: Induction & Synchronous Machines Lab

After completion of the course the student able to

S.No.	CO Statement	Taxonomy
C2227.1	Analyze specifications, Characteristics and circuit diagrams of various Induction machines for their operation.	Analyze
C2227.2	Analyze different Induction motors for various applications.	Evaluate
C2227.3	Apply different starting methods to start Induction Motors.	Apply
C2227.4	Apply different starting methods to start Synchronous motors.	Apply
C2227.5	Apply different regulation methods to find Alternator performance.	Analyze
C2227.6	Apply different synchronization methods to synchronize Alternators.	Evaluate

Faculty signature:



DNR College of Engineering & Technology :: Bhimavaram

Department of Electrical & Electronics Engineering

ELECTICAL MACHINES LAB

A.Y: 2021-22

DEGITAL ELECTRONICS LAB

II B.Tech - II Semester – EEE

COURSE OUTCOMES

Course Name: Induction & Synchronous Machines Lab

After completion of the course the student able to

S.No.	CO Statement	Taxonomy
C2228.1	Analyze the basics of gates, filp-flops.	Analyze
C2228.2	Analyze the basics of counters.	Analyze
C2228.3	Analyze basic combinational circuits and verify their functionalities	Apply
C2228.4	Apply the design procedures to design basic sequential circuits	Apply
C2228.5	Understand the basic digital circuits and to verify their operation	Analyze
C2228.6	Apply Boolean laws to simplify the digital circuits.	Evaluate

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Department of Electrical & Electronics Engineering

SYSTEMS LAB

A.Y: 2021-22

SKILLORIENTED COURSE

DESIGN OF ELECTRICAL CIRCUITS USING ENGINEERING SOFTWARE TOOLS LAB

II B.Tech - II Semester – EEE

COURSE OUTCOMES

Course Name: Skill Oriented Course Lab

S.No.	CO Statement	Taxonomy
C2229.1	Apply various technologies of Internet of Things to real time applications.	Analyze
C2229.2	Apply various communication technologies used in the Internet of Things	Apply
C2229.3	Connect the devices using web and internet in the IoT environment	Apply
C2229.4	Implement IoT to study Smart Home etc.	Apply
C2229.5	implement IoT to study Smart city, etc.	Apply
C2229.6	Connect the devices using internet in the IoT environment	Apply

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B. Tech in Electrical & Electronics Engineering	AY	2023-24
Course Name:	POWER SYSTEMS-II	Class / Sem	III/I
Faculty Name:	T.VENKATESWARA RAO	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2311.1	Evaluate the parameters of transmission lines for different circuit configurations.	Evaluate
C2311.2	Determine the performance of short, medium and long transmission lines.	Evaluate
C2311.3	Analyze the effect of travelling waves on transmission lines.	Analyze
C2311.4	Apply the various voltage control methods and effect of corona.	Apply
C2311.5	Calculate sag/tension of transmission lines and performance of line insulators.	Evaluate
C2311.6	Analyze the performance of line insulators.	Analyze

#Remember; Understand; Apply; Analyze; Evaluate; Create

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B.Tech in Electrical And Electronics Engineering	AY	2022-2023
Course Name:	Power Electronics	Class/Sem	III-I
Faculty Name:	P.Nagaraju	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C312.1	Illustrate the characteristics of various power semiconductor devices and analyze the static and dynamic characteristics of SCR's.	Apply
C312.2	design firing circuits for SCR.	Create
C312.3	Analyze the operation of single phase full-wave converters and analyze harmonics in the input current.	Analyze
C312.4	Demonstrate the operation of three phase full-wave converters.	Apply
C312.5	Analyze the operation of different types of DC-DC converters	Analyze
C312.6	explain the operation of inverters and application of PWM techniques for voltage control and harmonic mitigation. analyze the operation of AC-AC regulators	Understand

#Remember; Understand; Apply; Analyze; Evaluate; Create

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B.TECH in Electrical & Electronics Engineering	AY	2022-23
Course Name:	Control Systems	Class / Sem	III/I
Faculty Name:	D. Joseph Kumar	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C313.1	Derive the transfer function of physical systems and determination of overall transfer function using block diagram algebra and signal flow graphs.	Apply
C313.2	Determine time response specifications of second order systems and error constants.	Apply
C313.3	Analyze the absolute and relative stability of LTI systems using Routh's stability criterion and the Root locus method.	Analyze
C313.4	Analyze the stability of LTI systems using frequency response methods.	Analyze
C313.5	Design the Lag, Lead, Lag-Lead compensators to improve system performance from Bode diagrams.	Create
C313.6	Determine the response of physical systems as state models and Understanding the concepts of controllability and Observability	Apply

#Remember; Understand; Apply; Analyze; Evaluate; Create

Faculty signature

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Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2022-2023
Course Name:	CS Lab	Class/ Sem	III/I
Faculty Name:	D. Joseph Kumar	Regulation	R20

COURSE OUTCOMES

Course Name: Control Systems Lab

CO	CO Statement	Taxonomy
C2316.1	Analyze the performance and working Magnetic amplifier, D.C and A.C. servo motors and synchros	Analyze
C2316.2	Design P, PI, PD and PID controllers	Evaluate
C2316.3	Design lag, lead and lag-lead compensators	Apply
C2316.4	Control the temperature using PID controller	Apply
C2316.5	Test the controllability and observability	Analyze
C2316.6	Judge the stability of any system in time and frequency domain.	Evaluate

Faculty in-charge

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Course Outcomes (COs)

Program Name:	B. Tech in Electrical & Electronics Engineering	AY	2022-2023
Course Name:	POWER ELECTRONICS LAB	Class/ Sem	III/I
Faculty Name:	E.RAJASUNIL	Regulation	R20

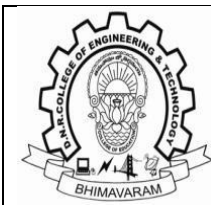
Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2327.1	Analyze the characteristics of various power electronic devices	Analyze
C2327.2	Describe the performance of single-phase and three-phase full-wave bridge converters with both resistive and inductive loads.	Analyze
C2327.3	Understand the operation of single phase AC voltage regulator with resistive and inductive loads	Analyze
C2327.4	Explain the working of Buck converter, Boost converter, single-phase square wave inverter and PWM inverter	Apply
C2327.5	Construct Boost converter in Continuous Conduction Mode operation.	Evaluate
C2327.6	Construct single phase AC Voltage regulator.	Apply

#Remember; Understand; Apply; Analyze; Evaluate; Create

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Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2022-2023
Course Name:	Employability Skills	Class/ Sem	III/I
Faculty Name:	G.MOSES	Regulation	R20


Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2329.1	Recollect the human, moral values and ethics.	Analyze
C2329.2	Illustrate the principles to bring harmony among I, we and nature by focusing on human duties, rights, and dignity.	Analyze
C2329.3	Describe the various Engineering Ethics and social issues that are encountered by every professional in discharging professional duties.	Analyze
C2329.4	Describe the Engineers' Responsibilities towards Safety and Risk and based on this make analysis on designing to keep safety measure.	Apply
C2329.5	Demonstrate the professional ethics and techniques for collegiality and problem solving?	Evaluate
C2329.6	Discuss the globalization and MNC issues like – cross culture, business ethics and research ethics etc.	Analyze

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Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2022-2023
Course Name:	Summer Internship	Class/ Sem	III/I
Faculty Name:	T.Venkateswara Rao	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2329.1	Demonstrate a proficiency in applying theoretical knowledge gained during academic coursework to solve real-world problems in the field of electrical and electronics engineering.	Analyze
C2329.2	Gain practical experience in managing and coordinating engineering projects, including planning, execution, monitoring, and reporting.	Analyze
C2329.3	Enhance written and oral communication skills by effectively documenting project progress, preparing technical reports, and presenting findings to both technical and non-technical audiences.	Analyze
C2329.4	Develop strong collaborative skills by actively participating in team projects, contributing ideas, and working cohesively with team members to achieve project goals.	Apply
C2329.5	Acquire a comprehensive understanding of industry practices, standards, and regulations relevant to the electrical and electronics engineering field.	Evaluate
C2329.6	Demonstrate the ability to identify, analyze, and solve engineering problems creatively, utilizing innovative approaches and critical thinking skills.	Analyze

#Remember; Understand; Apply; Analyze; Evaluate; Create

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Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2023-2024
Course Name:	FACTS	Class/ Sem	VI/I
Faculty Name:	M.Srinu	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2411.1	Comprehend the fundamentals of Flexible AC Transmission Systems including the principles of operation, various components involved	Analyze
C2411.2	Analyzing different FACTS devices such as Static VAR Compensators (SVC), Static Synchronous Compensators (STATCOM), and Unified Power Flow Controllers (UPFC)	Analyze
C2411.3	Apply control strategies employed in FACTS devices for voltage regulation, power flow control, and damping oscillations in power systems.	Apply
C2411.4	Develop skills in modeling FACTS devices and integrating them into power system simulation software.	Analyze
C2411.5	Analyze power system stability issues such as voltage stability, transient stability, and small-signal stability	Analyze
C2411.6	Apply FACTS devices for optimizing power system operation and improving its efficiency.	Apply

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2023-2024
Course Name:	HVE	Class/ Sem	VI/I
Faculty Name:	G. Nagajyothi	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2411.1	Outline the importance of different insulating media used in the high voltage equipment's.	Analyze
C2411.2	Distinguish different methods of breakdown mechanisms in liquid, solid and Gaseous media	Analyze
C2411.3	Discuss about the principle of operation of High Voltage DC, AC and Impulse voltages and currents.	Understand
C2411.4	Apply the knowledge of different methods and techniques for generation and measurement of high DC, AC and impulse voltages and currents.	Apply
C2411.5	Explain the Partial Discharge measurement Techniques	Understand
C2411.6	Explain about various testing techniques of HV equipments.	Understand

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2023-2024
Course Name:	PSOC	Class/ Sem	VI/I
Faculty Name:	T. Venkateswara Rao	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2411.1	Evaluate thermal power generation for economic operation with & without transmission losses	Evaluate
C2411.2	Evaluate hydro-thermal power generation mix for economic operation with & without transmission losses	Evaluate
C2411.3	Solve the unit commitment problems using iterative technique satisfying equality and inequality constraints for optimal solution.	Apply
C2411.4	Explain load frequency control & estimate the frequency deviation through modeling.	Evaluate
C2411.5	Compute steady state error for changes in load demand & design controller to minimize the error for single area and two area systems	Create
C2411.6	Choose and model controllers for reactive power compensation in a system to improve system voltage.	Apply

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2023-2024
Course Name:	IML	Class/ Sem	VI/I
Faculty Name:	Ch.Venkat Reddy	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2411.1	Domain Knowledge for Productive use of Machine Learning and Diversity of Data.	Understand
C2411.2	Demonstrate on Supervised and Computational Learning	Apply
C2411.3	Analyze on Statistics in learning techniques and Logistic Regression	Analyze
C2411.4	Illustrate on Support Vector Machines and Perceptron Algorithm	Design
C2411.5	Design a Multilayer Perception Networks and classification of decision tree	Analyse
C2411.6	Estimate the cost of constructing object oriented software.	Apply

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Electrical & Electronics Engineering

Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2023-2024
Course Name:	IE	Class/ Sem	VI/I
Faculty Name:	E.Rajsunil	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2411.1	Identify and explain the operation of basic electronic components used in industrial systems, including diodes, transistors, and operational amplifiers.	Analyse
C2411.2	Analyse and designing analog circuits commonly found in industrial applications.	Analyse
C2411.3	Demonstrate proficiency in digital electronics by understanding logic gates, flip-flops, counters, and registers, and be able to design and analyze digital circuits for industrial control and automation.	Apply
C2411.4	Understand the principles of sensor operation, interfacing techniques, and signal conditioning methods, essential for acquiring and processing data in industrial environments.	Understand
C2411.5	Analyse various industrial control systems, including PLCs (Programmable Logic Controllers) and SCADA.	Analyse
C2411.6	Analyse and design power electronic circuits and understand their applications in industrial systems.	Analyse

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Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2023-2024
Course Name:	UHV	Class/ Sem	VI/I
Faculty Name:	K. Chandramouli	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2411.1	Understand and analyse the essentials of human values and skills, self exploration, happiness and prosperity.	Understanding
C2411.2	Evaluate coexistence of the "I" with the body.	Evaluate
C2411.3	Identify the role of harmony in family.	Understanding
C2411.4	Evaluate the role of harmony in society and universal order.	Evaluate
C2411.5	Understand and associate the holistic perception of harmony at all levels of existence	Understanding
C2411.6	Develop appropriate technologies and management patterns to create harmony in professional and personal lives.	Create

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Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2022-2023
Course Name:	MLP with Python	Class/ Sem	VI/I
Faculty Name:	Ch. Venkata Reddy	Regulation	R20

Course Outcomes


After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2411.1	Demonstrate a comprehensive understanding of core machine learning concepts.	Analyze
C2411.2	Implement popular machine learning algorithms such as linear regression, logistic regression, support vector machines.	Apply
C2411.3	Apply various data preprocessing techniques such as handling missing values, feature scaling, one-hot encoding, and feature selection to prepare datasets for machine learning models.	Apply
C2411.4	Evaluate the performance of machine learning models using appropriate evaluation metrics	Evaluate
C2411.5	Utilize techniques like grid search, random search, and cross-validation to tune hyperparameters of machine learning models.	Analyze
C2411.6	Apply machine learning algorithms to real-world datasets and problem scenarios, gaining practical experience in solving classification, regression, and clustering tasks, and interpreting model predictions in the context of domain-specific	Apply

	applications.	
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Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2022-2023
Course Name:	INTERNSHIP	Class/ Sem	VI/I
Faculty Name:	T.Venkateswara Rao	Regulation	R20

Course Outcomes


After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
C2411.1	Apply theoretical concepts learned in their academic coursework to real-world industrial settings.	Apply
C2411.2	Enhance their professional communication skills, including oral and written communication, presentation skills, and the ability to effectively convey technical information.	Understand
C2411.3	Develop problem-solving abilities, critical thinking skills, and the capacity to analyze complex situations to identify and implement effective solutions.	Analyze
C2411.4	Gain exposure to project management practices, including project planning, scheduling, resource allocation, and risk management, by working on assigned tasks and projects within the industrial environment.	Understand

C2411.5	Collaborate with multidisciplinary teams within the industry, and enhance teamwork skills, interpersonal skills, and the ability to work effectively in diverse team settings towards common goals.	Analyze
C2411.6	Cultivate a deeper understanding of professional ethics, work values, and the importance of integrity, responsibility, and accountability in the workplace	Understand

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Course Outcomes (COs)

Program Name:	B.Tech in Electrical & Electronics Engineering	AY	2022-2023
Course Name:	PROJECT	Class/ Sem	VI/II
Faculty Name:	T.Venkateswara Rao	Regulation	R20

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
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C2421.1	Identify right problem and come with abstract for the proposed problem.	Analyze
C2421.2	Build a prospective solution based on recent literature survey and data gathering.	Apply
C2421.3	Identify the various resources and components required to complete project.	Analyze
C2421.4	Solve the problem by creating a working model implementation or simulation study using a tool.	Evaluate
C2421.5	Justify the project work progress to a panel of experts in the form of written report and presentation.	Analyze
C2421.6	Conduct Experimental or simulation studies and take observations, analyze and conclude the results.	Apply
C2421.7	Develop a module using appropriate syntax.	Create
C2421.8	Fabricate a working model or Apply software tool to solve the problem.	Apply
C2421.9	Prepare a thesis as per given university guidelines for the project taken up.	Create
C2421.10	Plan the tasks required for the project and split among team for execution and complete the project within the stipulated time.	Analyze
C2421.11	Express the contribution towards the project as a team member while submitting the report.	Analyze
C2421.12	Participate in competitions or exposor technical publications to demonstrate the project outcomes.	Create

#Remember; Understand; Apply; Analyze; Evaluate; Create

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