ELECTRICAL ENGINEERING(EE-101)

Pre-requisite: None
Credit Hours: 02
Contact Hours: 32

RECOMMENDED BOOK(S)

Principles of Electric Circuits by Floyd , 9th Edition

REFERENCE BOOK(S)

Fundamentals of Electric Circuits by Charles Alexander

COURSE OBJECTIVES

To understand the basic circuit concepts, network laws and theorems.
To acquire fundamental knowledge for motors and generators.

S. No.	CLO/PLOS MAPPING	DOMAIN	PLO
1	**Describe** and **illustrate** basic circuit concepts, network laws and theorems used to analyze linear circuits	C2, C3	01
2	**Describe** the basic construction, operation and characteristics of motors and generators	C2	01

COURSE CONTENTS

Introduction, Voltage, Current & Resistance, Ohms Law
Energy & Power
Series & Parallel Circuits
Non Series & Parallel Circuits throughWye Delta Transformations
Branch, Loop & Node Analysis
DC Motors & DC Generators
Introduction to AC Current & Voltage, Sinusoidal Waveform, Agular measurement of a Sine Wave, Sinewave Formula
Introduction to Phasors, Analysis of AC Circuits
AC Generator, AC Synchronous Motor, AC Induction Motor