ELECTRICAL ENGINEERING LAB (EE-101L)

Pre-requisite: None
Credit Hours: 01
Contact Hours: 48

RECOMMENDED BOOK(S)

Electronic Devices by Floyd 9 th Edition

REFERENCE BOOK(S)

Micro-Electronic Circuits by Sedra / Smith , 5 th Edition

COURSE OBJECTIVES

The objective of this lab is to verify the working principles, and to implement the basic concepts of different electrical devices in practical form including resistors,capacitor, potentiometer,transformer and different meters. How to use basic level concepts of electrical devices in practical life.

S. No.	CLO/PLOS MAPPING	DOMAIN	PLO
1	**Perform** sensing techniques of basic electrical quantities.	P5	01
2	**Operate** electrical components using Kirchhoff's law	P3	02
3	**Present** a complete electrical system by using different electrical concepts.	A2	09

COURSE CONTENTS

Resistance and Capacitance:
Introduction to the Measuring Methods of Resistance and Capacitance
DMM:
Use of DMM
Series DC circuit:
To investigate the characteristics of a series DC circuit
Parallel DC circuit:
To investigate the characteristics of a parallel DC circuit
Kirchhoff's Laws:
To verify experimentally Kirchhoff's voltage and current Law
Slide Potentiometer:
Variation of output voltage with setting of slide Potentiometer

Wheatstone Bridge:
Building of Wheatstone Bridge
Star /Delta conversion:
Star /Delta conversion and calculate power
Earth Resistor:
Measurement of Earth Resistance using Earth Resistor
Clamp Meter:
Use of Clamp Meter
Frequency Meter:
Use of Frequency Meter
Watt Meter:
Use of Watt Meter
Transformer:
To study working of Transformer