II Year-I Semester		**L**	**T**	**P**	**C**
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ELECTRICAL CIRCUITS LAB (R1621028)

Prerequisite Course: Electrical circuit analysis-I and II

Course Description and Objectives:
To verify theorems measure various electrical parameters and to measure the power in three phase circuits for various types of load.

Course Outcomes:

 Upon completion of, the student will be able to achieve the following outcomes.

Cos	Course Outcomes	POs
1	Design and analyze basic electrical circuits with the application of various network theorems	6
2	Study the behavior of RLC circuits at resonant frequency and Analyze various inductive circuits and determine coefficient of coupling	5
3	Determination of two port network parameters	5
4	Determination of 3-ϕ power of balanced and unbalanced systems	5

Syllabus:

Any 10 of the following experiments are to be conducted:
1) Verification of Thevenin's and Norton's Theorems.
2) Verification of Superposition theorem and Maximum Power Transfer Theorem.
3) Verification of Compensation Theorem.
4) Verification of Reciprocity, Millmann's Theorems.
5) Locus Diagrams of RL and RC Series Circuits.
6) Series and Parallel Resonance
7) Determination of Self, Mutual Inductances and Coefficient of coupling.
8) Z and Y Parameters
9) Transmission and hybrid parameters
10) Measurement of Active Power for Star and Delta connected balanced loads.
11) Measurement of Reactive Power for Star and Delta connected balanced loads.
12) Measurement of 3-phase Power by two Wattmeter Method for unbalanced loads.