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Department of Electrical Engineering	
Electrical Circuits Lab (63215)	
Total Credits	**1**
major compulsory	
Prerequisites	P1 : Electrical Circuits I (63211)

Course Contents

Principles of Electrical can be expert through laboratory experiments. The experiments usually cover: Introduction to Lab Instruments, Ohms law, Network Theorem, Voltage Source, Characteristics of AC circuit, Capacitors and Inductors, RLC Series and parallel, Resonance, Three phase circuits

Intended Learning Outcomes (ILO's)		Student Outcomes (SO's)	Contribution
1	Basic Knowledge of Principles of Electrical circuits and analysis	A	20 %
2	Knowledge to be build and take measurements deferent type of electrical circuits	B	30 %
3	To be familiar with the laboratory devices	B	30 %
4	An ability to identify, formulate, and solve circuits problems	E	10 %
5	An ability ORCAD methods to solve electrical circuits engineering problems	K	10 %

Textbook and/ or Refrences

Electrical circuits lab ,N Zayid.

Assessment Criteria	Percent (%)
Laboratory Work	70 %
Final Exam	30 %

Course Plan

Week	Topic
1	Introduction &Safety instructions
2	EXPERIMENT # 1: Introduction to Circuits
3	EXPERIMENT # 2: Ohms Law &Resistors-Series and Parallel Connection
4	EXPERIMENT # 3: Network Theorems
5	EXPERIMENT # 4: Voltage Source
6	EXPERIMENT # 5: Characteristics in AC
7	EXPERIMENT # 6: Capacitor in the A. C. Circuit
8	EXPERIMENT # 7: Inductors in the A. C. Circuit
9	EXPERIMENT # 8: RLC Series &Paralle
10	EXPERIMENT # 9: Series Resonance
11	EXPERIMENT # 10: Parallel Resonance
12	EXPERIMENT # 11: Three-Phase Alternating Current
13	EXPERIMENT # 12: Using Computer for Analyses
14	Final Exam Practical Part
15	Final Exam Theoretical Part