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Department of Electrical Engineering	
Electronic Circuits Lab (63314)	
Total Credits	**1**
major compulsory	
Prerequisites	P1 : Electronic Circuits I (63214) OR Electronic Circuits I (63260) P2 : Electrical Circuits Lab (63215)

Course Contents

Electronics lab has been prepared to equip the students with the necessary practical and theoretical knowledge of electronic principles. During the lab the students become very familiar with , Types of Diodes, Rectifier diode, Half wave rectifier, Bridge rectifier, On state and off state characteristic of zener diode, Testing the layering and rectifying of bipolar transistor, Characteristic of the transistor, Depletion layer Fets, Characteristic of the Fets, Multistage amplifier, Differential amplifier, Push pull output amplifier, Operational amplifier

	Intended Learning Outcomes (ILO's)	Student Outcomes (SO's)	Contribution
1	Basic Knowledge of Principles of Electrical circuits and analysis Knowledge	A	25 %
2	Ability to take measurements deferent type of Electronic circuits	B	25 %
3	An ability To function and work the experiments as team	D	20 %
4	An ability to identify, formulate, and solve electronics circuits problems	A	20 %
5	An ability ORCAD methods to solve electronics circuits engineering analyses and designee	K	10 %

Textbook and/ or Refrences

Electronic circuits lab ,N Zayid.

Assessment Criteria	Percent (%)
Projects	10 %
Laboratory Work	60 %
Final Exam	30 %

Course Plan

Week	Topic
1	Introduction - Pspice (ORCAD) 1
2	Exp 2: Junction diodes and Applications
3	Exp 3: Zener Diodes and Applications
4	Exp 4: Bipolar junction transistoir
5	Exp 5: Soldering and Desoldering Skills
6	Exp 6: Junctions field effect transistor
7	Exp 7: Amplifiers.
8	Exp 8: multistage amplifires
9	Exp 9: deferential Amplifiers.
10	Exp 10: push Pull Amplifiers.
11	Exp 11: Operational Amplifiers Study.
12	Exp 12: Op-amp circuit / non inverting amplifiers.
13	Exp 13: dynamic Behavior of Op-amp.
14	Exp 14: mini project discussion.

15	Practical Exam
16	Theoretical Exam