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Department of Mechanical Engineering	
Electrical Cirucits (63292)	
Total Credits	**3**
major compulsory	
Prerequisites	P1 : General Physics II (22102)

Course Contents

Components and variables of electric circuits. Voltage and current laws. Circuit analysis techniques. Sinusoidal steady state analysis. AC Power analysis. Three phase system analysis, Y & connections and their calculations.

Intended Learning Outcomes (ILO's)		Student Outcomes (SO's)	Contribution
1	Basic components and lows of electric circuits,circuit analysis techniques.	A	45 %
2	Sinusoidal steady state analysis and AC power Analysis.	E	35 %
3	Three phase system analysis.	E	20 %

Textbook and/ or Refrences

- Engineering Circuit Analysis by: William H Hayt, Jack E. Kemmerly &Steven M.Durbin , 6th Edition.

Assessment Criteria	Percent (%)
First Exam	20 %
Second Exam	20 %
Quizzes	10 %
Final Exam	50 %

Course Plan

Week	Topic
1-2	Basic components and lows of electric circuits.
3-7	Useful circuit analysis techniques.
7	(1st Exam)
8-12	Sinusoidal steady state analysis and AC power analysis
12	(2nd Exam)
13-16	Three phase system analysis and Y & connections and their calculations
16	(Final Exam)