Faculty of Engineering & Technology

Electrical Circuits 1

Information :

Course Code : EED201	**Level** : Undergraduate	**Course Hours :** 4.00- Hours

Department : Electrical Power Engineering

Instructor Information :

Title	Name	Office hours
Associate Professor	Moneer Mohamed Ali Abu-Elnaga	6
Assistant Lecturer	Ahmed Moreab Hussien Mohamed	
Assistant Lecturer	SHEROUK SOBHI ABDELSALAM FOUDA	
Assistant Lecturer	Mohamed Abdallah Mahmoud Shaheen	

Description :

Basic electrical quantities, Ohm's Law, Kirchhoff's Laws, Resistance and source combinations, Voltage and current division, Y-delta transformation. Techniques of solving DC electric circuits: nodal and mesh analysis, source transformation. Circuit theorems: superposition, Thevenin, Norton and Maximum power transfer. AC sinusoidal sources, Time domain and phasor representation, Inductance and capacitance: Voltage and current relationships, Impedance and admittance, Voltages and currents phasor diagrams, Techniques of solving AC electric circuits: Nodal analysis, Mesh analysis, and source transformation. Theorems: superposition, Thevenin, and Norton. Steady state power analysis.