FUTURE UNIVERSITY IN EGYPT
جامعة المستقبل

Faculty of Engineering & Technology

Electrical Circuits

Information :

Course Code :	EED203	**Level :**	Undergraduate	**Course Hours :**	3.00- Hours

Department : Mechatronics Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	Mohamed Abdallah Mahmoud Shaheen	
Teaching Assistant	Abeer Tharwat Said Awad	
Teaching Assistant	Shorouk Mohamed khaleel Mohamed	

Description :

Basic electrical quantities, Ohmôs Law and Kirchhoffôs Laws, resistance and source combinations, voltage and current division. Techniques of solving DC electric circuits: nodal analysis and mesh analysis. Theorems: superposition theorem. AC sinusoidal sources, time domain and frequency (phasor) domain, voltages and currents phasor diagrams, inductance and capacitance: voltage and current relationships, impedance and admittance, Techniques of solving AC electric circuits: nodal and mesh analysis, and superposition. Steady state power analysis: Real Power, maximum power transfer theorem, complex power, and power measurement. Three phase circuits; connections: Y-Y, Y-ǻ, ǻ-Y, ǻ-ǻ and power measurements.