Faculty of Engineering & Technology

Electrical Circuits 1

Information :

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

Department : Computer & Intelligent Systems Engineering

Description :

Basic electrical quantities, Ohmôs Law, Kirchhoffôs Laws, Resistance and source combinations, Voltage and current division, - 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.