

## 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 FOU DA	
Assistant Lecturer	Mohamed Abdallah Mahmoud Shaheen	
Assistant Lecturer	Ahmed Moreab Hussien Mohamed	
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.