

## Faculty of Engineering & Technology

### Electricity and Magnetism

#### Information :

**Course Code :** EMP122

**Level :** Undergraduate

**Course Hours :** 4.00- Hours

**Department :** Faculty of Engineering & Technology

#### Instructor Information :

Title	Name	Office hours
Lecturer	AHMED MOHAMED ALI ASHOUR AHMED	
Assistant Lecturer	Mohamed Essam Abd El Aziz Abd El Aal	
Assistant Lecturer	Mohamed Essam Salah Eldin Mohamed Hassan Amer	
Teaching Assistant	Youmna Elsayed Abd Elalem Mohamed Sayed Ahmed	
Teaching Assistant	Ahmed Abdelfattah Abdelaziz Abdelfattah	

#### Description :

Electricity: Electric fields, Electric flux, Gauss's Law and its application to various charge distributions, Electric Potential, Capacitance and dielectrics, Electric current and resistance, Direct-current circuits. Magnetism: Magnetic field, Magnetic force, Biot-savart Law, Ampere's Law, Magnetic flux, Electromagnetic induction, Maxwell's equation in integral form and their physical meaning for electromagnetism.