

## 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
Associate Professor	Ahmed Shawky Mohammed Ghareeb	1
Teaching Assistant	Youssef Hany Abdelwahed Abdelghany Nour	
Teaching Assistant	Asmaa Abdelmotlb Youssef Aly	
Teaching Assistant	Jomana Tamer Mohamed Abd Elghany	
Teaching Assistant	Mohamed Mahmoud Yassin Ahmed Ismail	

## **Description:**

Electricity: Electric fields, Electric flux, Gausso 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, Ampereos Law, Magnetic flux, Electromagnetic induction, Maxwell's equation in integral form and their physical meaning for electromagnetism.