

## 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 | Borham Mohamed Taher El adorousy Ali eldin | 2            |
| Lecturer            | MOHAMED EHAB AHMED FAKHERELDIN BAKR        | 5            |
| Assistant Lecturer  | REHAM MILAD KAMEL SAMAAN                   |              |
| Assistant Lecturer  | Nada El Said Abdallah Hassan Salem         |              |
| Assistant Lecturer  | Nada El Said Abdallah Hassan Salem         |              |
| Assistant Lecturer  | REHAM MILAD KAMEL SAMAAN                   |              |
| Assistant Lecturer  | Ahmed Abdelfattah Abdelaziz Abdelfattah    |              |
| Teaching Assistant  | Mohamed Fathy Salem Mohamed                |              |
| Teaching Assistant  | Alaa Mostafa Arafa Afify Lashin            |              |
| Teaching Assistant  | Salma Motaz Fouad Ali El Sherif            |              |
| Teaching Assistant  | Mariam Mohamed Ali Ahmed Elshimey          |              |

#### 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.