

**Faculty of Engineering & Technology**

**Electrical Power Sources**

**Information :**

**Course Code :** EED457

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

**Department :** Communication and Computer Engineering

**Description :**

Power system structure: Generation, Transmission, Distribution. Transformers: Types, Structure, Equivalent circuit, Operation, Performance. Synchronous generators: Structure, Equivalent circuit, Operation, performance, Backup generators. Batteries: Types, Operation, Performance. Uninterruptable power supplies: Structure, Operation, Topologies. Standalone photovoltaic systems: Components, Performance, Sizing. Smart Grids: Concept, Structure, Communication Aspects.