The BRITISH UNIVERSITY IN EGYPT

FACULTY OF ENERGY & ENVIRONMENTAL ENGINEERING

Renewable Energy – Electrical Power Engineering Programme

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Program Focus:

Renewable Energy Program – Electrical Power Engineering (RENE) focuses on the study of power systems, circuit design, control systems and electrical machines applications as well as sustainable energy modules related to these major branches of applied engineering. The study of various renewable energy sources and technologies within the specialism of RENE, e.g. solar photovoltaic, hydropower and wind energy engineering, is considered as a plus for RENE graduates which assists them find jobs in the sustainable energy field.

Job Opportunities:

Market opportunities include, but not limited to the following:

- Conventional and renewable energy power plants,
- Smart grids and distribution systems,
- Energy efficiency projects and energy audits.

Modules:

Students through their study years cover a suit of modules that cover the basics as well as the applications of the renewable energy – mechanical power engineering field such as (but not limited to):

- Electrical circuits
- Electrical machines
- Mechatronics
- Data acquisition and sensors
- Power system analysis
- Solar PV energy
- Wind energy
- Renewable energy policy
- Power generation systems
- Hydropower
- Tidal and wave energy
- Energy storage technologies
- Microgrids and grid connected systems
- Network interfacing of renewables
- Power electronics

Research:

Faculty members, staff, and students are conducting research on various fronts of the energy field such as:

- Solar electrical energy production and storage.
- Renewable energy integration into the electricity grid
- Innovative solar photovoltaic technologies