

SCHOOL OF ENGINEERING

1. MSc./PhD SUSTAINABLE ENERGY

Programme Objectives:

Objectives of the MSc Programme

The MSc in Sustainable Energy Management programme has been designed for students wishing to further enhance their career prospects in energy management. The programme will meet its overarching goal to educate its graduates professionally and ethically to be valuable professionals in Ghana and abroad, with the following objectives:

- To provide a deeper understanding of the current status and future trends in sustainable energy development and social corporate responsibility with the purpose of alerting students about energy sustainability concerns on global, regional and local levels.
- To identify and respond to complex energy systems problems involving technical, environmental and socioeconomic components.
- To apply advanced systems analysis tools in a multi-disciplinary setting in order to plan, analyze, design and implement solutions to energy systems problems.
- To develop application of energy tools and techniques to integrate sustainable practices (economical, environmental and social concerns).
- To provide understanding of the complex interactions between energy system solutions and their implications on larger scale (regional, national, global) technological, economic, societal and energy systems with a view on long-term sustainability.

Objectives of PhD Programme

The Doctor of Philosophy in Sustainable Energy Management programme has been designed for post graduates wishing to enhance their career prospects in sustainable energy management to occupy faculty and research positions. The programme aims to provide advanced training for both engineers and scientists concerned with sustainably managing energy resources and processes at the PhD level.

Target Audience

The Sustainable Energy Management (SEMA) programme is open to all applicants having the requisite technical background knowledge: First degree holders of renewable energy technologies, electrical, mechanical, agricultural and energy engineering's, sciences, and professionals with industry experience interested in pursuing masters and PhD degrees in sustainable energy management.

Duration:

- i. MSc.: Minimum 2 years and Maximum 3 years for weekdays; Minimum 3 years and Maximum 5 years for weekends
- ii. PhD: Minimum 3 years and Maximum 5 years for weekdays; Minimum 4 years and Maximum 6 years for weekends

Available Session:

Weekend and Weekdays

Entry Requirements:

a. Masters Programme: To be eligible for admission into the **Masters Research Degree** programme, candidates must be graduates of this University or any other University recognised by the Academic Board and shall normally have obtained a minimum of Second Class (Lower Division) degree in the relevant field (e.g. renewable energy engineering, electrical engineering, agricultural engineering, mechanical engineering etc). Excellent candidates may be admitted into research masters programme in the first instance and later upgraded into the PhD programme after successful completion of the course work and upon recommendations from the Department and School Boards. The applicant must complete National Service prior to the commencement of the academic year he/she is seeking to enroll into the programme. All applicants must undergo a selection interview.

b. Doctoral Programme: To be eligible for admission to the Doctor of Philosophy degree programme, a student must have obtained a Master's degree from this University or its equivalent from any other University recognised by the Academic Board, with a strong potential to conduct independent research. Exceptional Second year M.Phil/MSc students may be upgraded into the Ph.D programme upon recommendation from the Department and School Boards. In exceptional cases non-research Masters degree holders may be admitted into the Ph.D programme after successful completion of further 6-12 months supervised postgraduate training programme.



2. MSc./PhD ENVIRONMENTAL ENGINEERING MANAGEMENT

Programme Objectives:

The programme seeks to provide advanced training for both engineers and scientists concerned with protecting the environment and human health through the provision of services such as water supply, wastewater treatment and municipal solid waste and hazardous waste management.

Target Audience

Academia, consultants, scientists and engineers working in the water, sanitation, environmental or civil engineering sectors.

Duration:

- i. MSc.: Minimum 2 years and Maximum 3 years for weekdays Minimum 3 years and Maximum 5 years for weekends
- ii. PhD: Minimum 3 years and Maximum 5 years for weekdays Minimum 4 years and Maximum 6 years for weekends

Available Session:

Weekend and Weekdays

Entry Requirements:

- a. Masters Programme:** To be eligible for admission into the Masters Research Degree programme, candidate must be graduate of this University or any other University recognised by the Academic Board and shall normally have obtained a minimum of Second Class (Upper Division) degree in the relevant field (eg. Environmental Sciences, Water Supply and Sanitation Engineering or Civil engineering).
- b. Doctoral Programme:** To be eligible for admission to the Doctor of Philosophy degree programme, a student must have obtained a Master's degree from this University or its equivalent from any other University recognised by the Academic Board, with a strong potential to conduct independent research (i.e. proof of publication record since the graduation from the MSc Programme is crucial).