



UCD College of Life Sciences Graduate School Graduate Opportunities



Your Career Opportunities with a Graduate Qualification MSc in Sustainable Energy & Green Technologies

Your acquired skills and the employment market

The *MSc in Sustainable Energy and Green Technologies* focuses on *Advanced Education and Training* in: development and optimization of renewable energy resource exploitation; efficiency in renewable energy generation and utilisation pathways (including energy conservation); mitigation of environmental impacts, and; preparation for business innovation and development of job opportunities in *Renewable Energy Systems* technology development (see reverse of this brochure for Programme Structure).

The programme will be of particular interest to graduates of engineering, science and related disciplines.

Graduates of the *MSc in Sustainable Energy and Green Technologies* will be able to:

- (1) Use their acquired knowledge to perform detailed feasibility studies, scientific analyses, and conduct research on sustainable energy systems and green technologies; from exploration, deployment and technical aspects of utilization, to environmental, social and economic impact analyses.
- (2) Use their knowledge to support local industry and community organizations in the development and utilization of renewable energy technologies, as well as supporting increased use of sustainable energy principles on a national basis (including development and/or enhancement of policies and standards).
- (3) Apply innovative technical solutions to problems in sustainable energy deployment, including demonstration of understanding of the process of identifying, capturing, developing and commercializing opportunities arising from their research.

Where the jobs are

Graduates of this programme will have competences and skill sets for employment in companies and organizations geared to planning, deploying and utilization of a wide range of Green Technologies systems including environmental impact mitigation.

Typical job opportunities will be in waste-to-energy facilities, biogas plants, ethanol production facilities, district-heating operations, renewable energy research laboratories, facilities utilizing wind energy (including wind farms), solar energy, biomass-to-energy conversion, as well as leading energy utility companies that are utilizing the different types of renewable energy resources.

The *Innovation and Technology Transfer* module in the programme provides graduates with unique insights into entrepreneurial process, from identification of the innovative idea through to the launch of a successful business. It covers management process required to transform an innovative idea into a commercial opportunity or business proposition in the Green Technologies sector.

There are also many opportunities for further study including focused Continuing Professional Development (CPD) areas. The skills you acquire, particularly through completion of the Minor Thesis provides a strong foundation for PhD research.

Application Procedure

Contact the Graduates Studies Administrator for further information: Ms. Karen Holland (karen.holland@ucd.ie or Tel.: 01 716 6102).

Relevant information can also be found at:

- [1] www.ucd.ie/agfoodvet/postgraduate_taught.html
- [2] <http://www.ucd.ie/bioresources/charlesparsons.html>



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MSc in Sustainable Energy & Green Technologies Programme Structure

