Master of Science in Energy and Sustainability

Postgraduate taught degree, face to face sessions
Programme duration: 12 months full-time study

About the Programme

The Master of Science in Energy and Sustainability a 1-year full-time postgraduate taught programme, designed to meet the Framework of Higher Education Qualifications (FHEQ) at Masters level and takes appropriate account of the subject benchmark statements in Engineering.

The programme aims to

- Provide advanced knowledge and understanding of specialist topics in Energy and Sustainability
- Develop transferable skills in research and knowledge acquisition
- Satisfy the professional development needs of the individual and his/her employers; providing relevant training to engineering graduates who wish to pursue a career in the area of Energy and Sustainability
- Provide a foundation for further postgraduate studies

The programme has been structured to emphasize existing energy situations both locally and worldwide, including environmental impact and legislation. Methodologies to reduce these issues are presented using materials for sustainability, renewable energy technologies, energy management, energy storage and renewable heating and cooling.

Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge, understanding and skills associated with Energy and Sustainability.

On completing the programme, students should be able to demonstrate comprehensive knowledge and understanding of:

2. The origins and distribution of different renewable energy sources (solar, wind, hydro, wave, tidal and bioenergy).
3. Storage/conversion and integration of different renewable energy sources into existing systems.
4. Sustainable use of materials to improve energy efficiency.
5. A number of key non-technical issues including system modelling, environmental issues and energy management.
Modules (All modules are core units)

- Energy Resources and Technologies
- Materials for Sustainability
- Environmental Impact, Legislation and Engineering
- Renewable Energy Technologies
- Energy Management
- Energy Storage
- Renewable Heating and Cooling
- Mechanical Integrity
- Masters Project

Minimum Entry Requirement

First degree in Mechanical Engineering or equivalent engineering qualification with minimum lower second class classification (2.2).

English Language Entry Requirements: IELTS overall 6.5 or equivalent.

Course Fees

SGD15,000 per programme, subject to prevailing taxes.

Applicant Eligibility

The course is only available to Singaporeans and Permanent Residents of Singapore.

How to apply

Interested applicants should attend a pre-application counselling session in NewRIIS before applying online at: http://www.ncl.ac.uk/postgraduate/apply/

For more information on the programme and programme preview dates, please contact the NewRIIS team: newriis.research@newcastle.ac.uk / +65 6514 0568.