Master of Science in Electrical Power Engineering
(MSc EPE)

Postgraduate taught degree, face to face sessions
Programme duration: 12 months full-time; 24 months part-time study

About the Programme
The Master of Science in Electrical Power Engineering is a 1-year full-time postgraduate taught programme. It is 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 will develop the advanced skills required for a career in electrical power engineering. It will provide extensive knowledge from recent industrial applications alongside all the relevant theoretical background. Successful students on this course will acquire the analysis, synthesis and evaluation skills required to solve important problems in electrical power engineering.

Learning Outcomes
The programme provides opportunities for students to develop and demonstrate knowledge, understanding, skills and other attributes associated with the theme of Electrical Power Engineering.

A successful student will have gained and be able to demonstrate:

- A knowledge and understanding of a total of 6 advanced topics in the field of Electrical Power Engineering: Power Electronics, Renewable Energy Technologies, Advanced Electrical Machines and Power Systems Operation and management, advanced power system analysis, smart grids and computational intelligence techniques.

- The technical expertise that underpins informed project planning, design and decision making in the area of Electrical Power Engineering.

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- Computer aided design and analysis techniques appropriate to Electrical Power.

- A particular topic connected with Electrical Power Engineering studied in-depth as part of a research project.
Modules (All modules are core units)

- Advanced Power System Analysis
- Advanced Power Electronics
- Advanced Electrical Machines and Drives
- Renewable Energy Technologies
- Power System Operation and Management
- High Voltage Technologies and Testing
- Smart Grids and Applications of Computational Intelligence
- Renewable Energy Heating and Cooling
- Individual Project

Minimum Entry Requirement

First degree in Electrical/Electronic 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.