MSc in Electrical Power Engineering
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

- 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.
- 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.

Accreditation

We will be seeking programme accreditation from the Engineering Accreditation Board (EAB).

Programme Structure and Delivery

The programme is available for study in full-time (12 months) and part-time modes (24 months).

You will study modules to a total value of 180 credits – taught modules worth 120 credits and individual project worth 60 credits, over three semesters.

Face-to-face lessons are recorded (uploaded to Blackboard, a web-based Virtual Learning Environment) and will take place in classrooms equipped with audio visual equipment.
This MSc aims to produce highly-skilled electrical power engineers to meet the growing challenges on power grids around the world with a focus on Singapore and the need to move to a future with clean and sustainable energy.

Dr Thillainathan Logenthiran
Degree Programme Director
Master of Science in Electrical Power Engineering

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Modules

All modules of the MSc in Electrical Power Engineering programme are compulsory modules.

- EPE8201 Advanced Power System Analysis
- EPE8202 Advanced Power Electronics
- EPE8203 Advanced Electrical Machines and Drives
- EPE8204 Renewable Energy Technologies
- EPE8205 Power System Operation and Management
- EPE8206 High Voltage Technologies and Testing
- EPE8207 Smart Grids and Applications of Computational Intelligence
- EPE8208 Renewable Energy Heating and Cooling
- EPE8209 Individual Project

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Fees & Funding

- Application Fee: SGD90 (non-refundable)
- Tuition Fees: SGD15,000

All fees charged are subjected to prevailing taxes.

Entry Requirements

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

English Language Requirements

IELTS overall 6.5 or equivalent.

Applicant Eligibility

This course is only available to Singaporeans and Permanent Residents of Singapore.
How to Apply

Interested applicants to our Postgraduate Programmes, kindly refer below for the steps on the application process.

1. Prospective candidates are required to visit Newcastle Research & Innovation Institute (NewRIIS) for a Pre-application Counselling session.
   (i) Kindly email the NewRIIS team for an appointment at: newriis.research@newcastle.ac.uk
   (ii) Please bring along the following original documents for verification when you visit NewRIIS
       - national registration identification card (pink/blue)
       - highest academic qualifications
       - testimonials
       - updated CV

2. Online application for the respective programme
   (i) Before applying, please prepare the following documents/items
       - programme code (please check with PG Programme Administrator/Coordinator, if you are unsure)
       - scanned national registration card (pink/blue)
       - scanned verified educational documents
       - updated CV
       - personal statement: www.ncl.ac.uk/postgraduate/apply/guide/#personalstatement
   (ii) Create account for online application: https://aspire.ncl.ac.uk/Register
   (iii) Apply online: www.ncl.ac.uk/postgraduate/apply

3. Payment of application fee of SGD90 (non-refundable) by cheque or bank transfer. All fees charged are subjected to prevailing taxes.

Contact

For more information please contact us at:
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Telephone: +65 6514 0568 / +65 9729 2492
Email: newriis.research@newcastle.ac.uk

CPE Registration No: 201706759K
Period of Registration:
1 November 2017 - 31 October 2018

www.ncl.ac.uk/singapore/newriis