MSc in Process Safety and Risk Management
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Awarded by Newcastle University

The Master of Science in Process Safety and Risk Management is a 2-year part-time postgraduate taught programme designed to enable students to understand the overarching requirement of compliance to legislation. It aims to enhance students’ knowledge and skills required to measure and quantify safety levels, hazardous emissions and exposure levels, and to design and operate inherently safer plants.

The Project Dissertation module will have access to state-of-the-art laboratories, allowing students to apply knowledge gained from lectures and to study certain specialist subject areas more deeply. The programme is taught by a team of practising Professional/Chartered Engineers, specialist scientists and representatives of local regulators to train students to be competent professionals in the health and safety profession. Students will obtain a prospective accredited postgraduate degree qualification to facilitate better career development and to enable students to develop deeper knowledge across the broad subject of process safety and risk management.

Learning Outcomes

- Greater understanding of legislation, standards and regulations related to process safety, occupational health, environmental emissions and impact.
- Greater understanding and knowledge of physical, chemical and biological hazards.
- Advanced knowledge and skills to measure and quantify hazards and risks.
- Advanced knowledge in the underpinning science and engineering skills required to design inherently safer engineering equipment and processes.
- Advanced knowledge and skills required to ensure process plants operate safely and workers are provided with safe environment to work.
- Advanced knowledge and skills required to respond effectively to catastrophic failure and emergency release.
- Advanced knowledge and skills required to manage process safety and risks.

Programme Structure and Delivery

The programme is available for study in part time mode only (24 months).

You will study modules to a total value of 180 credits – taught modules worth 120 credits and dissertation worth 60 credits.

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.
The MSc in Process Safety and Risk Management delivers training in a broad range of subjects crucial to Process Safety. It provides in-depth knowledge and skills, delivered by highly competent professionals in this important field.

Dr Ng Yuen Ling
Degree Programme Director
Master of Science in Process Safety and Risk Management

Modules

All modules of the MSc Energy and Sustainability programme are compulsory modules.

- NUS8100 Legislation Safety Case and Incident Investigation
- NUS8101 Environmental Impact, Legislation and Engineering
- NUS8102 Safety Engineering and Loss Prevention
- NUS8103 BioSafety Engineering and Occupational Health
- NUS8104 Research Method
- NUS8105 Safety, Health and Risk Management in Process, Petroleum and Offshore Engineering
- NUS8106 Hazard identification and Quantitative Risk Assessment
- NUS8107 Mechanical Integrity in Process Safety
- NUS8108 Process Control
- NUS8109 Project Dissertation

Fees & Funding

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

All fees charged are subjected to prevailing taxes.

Entry Requirements

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

- Candidates without a Bachelor Degree with at least 8 years of working experience and is at least 30 years old will also be considered on a case by case basis

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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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