XIAMEN UNIVERSITY MALAYSIA
厦門大學馬來西亞分校

DOCTOR OF PHILOSOPHY IN NEW ENERGY SCIENCE AND ENGINEERING

[N/0712/8/0001] 08/27 [MQA/PA13701]

DURATION OF STUDY	INTAKE	MEDIUM OF INSTRUCTION	ANNUAL FEE
Full-time: 3 - 5 years Part-time: 4 - 7 years	Open throughout the year	English	RM 30,000 (Local) RM 35,000* (International)

*Fees subject to 6% Sales & Service Tax (SST).

ABOUT THE PROGRAMME

In Xiamen University Malaysia (XMUM), the PhD in New Energy Science and Engineering offered research topics with the focus of energy related disciplines such as energynovel materials design, optimization and applications. This programme is designed to develop an in-depth understanding of recent developments in emerging energy materials and their applications, particularly with respect to the following disciplines:

- Catalysis
- Solar energy research
- Electrochemical energy storage research
- Piezoelectric energy research
- Energy materials simulation research
- Wave energy research
- Building-integrated photovoltaic, urban flows, heat and mass transfer, turbulence simulation research
- Petroleum chemical energy research
- Life cycle assessment, solid waste management, energy optimization research
- Low dimensional photonics and plasmonics, physical
- modelling of urban systems research
- Renewable and sustainable energy research

The programme provides practical training in an array of energy technology modules, such as energymaterials/devices fabrication, and materials characterization techniques, aiming to develop knowledge of the fundamental principles of chemistry, physics and engineering that underpins commercially important energy applications. Students have access to fully-equipped modern research laboratories and instrumentation in a multidisciplinary research-centric environment. Students have the opportunity to gain an array of interdisciplinary fundamental knowledge and practical skills, developed through specialist lectures, workshops, research seminars, and hands-on laboratory and analytical experience.

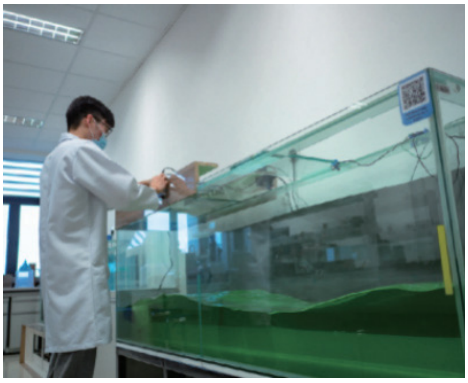
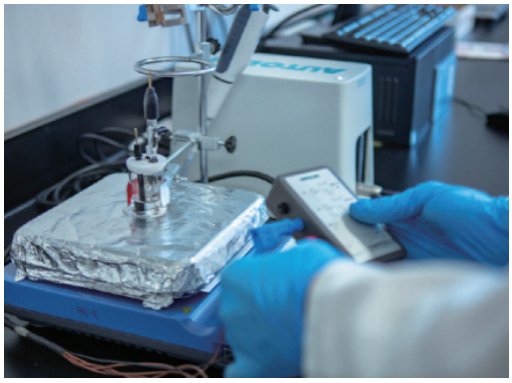
PROGRAMME HIGHLIGHTS

- Strong industry networking and progressive industry linkage
- High impact research projects and close collaboration with Xiamen University College of Energy, China
- Advanced research facilities
- Excellence with highly experienced and award winning academic staff
- Affordable fees with scholarship opportunities

CAREER OPPORTUNITIES

Excellent career prospects in energy related disciplines such as power plant, semiconductor, electronics, bioprocessing energy, environment, education, research and development (R&D)



ENTRY REQUIREMENTS

**For other equivalent qualifications, please consult our programme counsellor*

- A Master's Degree in related science or engineering discipline; OR
- Any other equivalent qualifications recognised by the Malaysian Government, with evidence of adequate related research or work experience and as accepted by the Senate; OR
- Candidates with a bachelor's degree who are registered for master's degree programmes may apply to convert their candidacy to the doctoral degree programmes within ONE (1) year after master's degree registration, subjected to:

  a. The candidate's competency and capability in conducting research at doctoral degree level

  b. Rigorous internal evaluation by the university

  c. Approval by the Senate

International students are required to achieve a minimum score of 5.0 for International English Language Testing System (IELTS) or its equivalent.*

** For equivalent English language assessments and minimum scores, please refer to the English Language Competency Equivalency Table in Appendix 1 of the Department of Higher Education (JPT) circular (Ref. JPT/GS 1000/630 Jld. 3 (12), dated 6 March 2023)*

MAIN COURSES

- Research Methodology
- Graduate Seminar
- Research Thesis

Additional Requirement*
- Chinese 1
- Selected Topics on China

*No additional tuition fees imposed.

Note:
- Students who obtained a Bachelor's or Master's degree in China can be exempted from Selected Topic on China.
- Students with a credit for Chinese course in previous result slips (UPSR/SPM/O-Level/UEC/A-Level/Foundation/Matriculation/ Diploma/HSK etc.) can be exempted from Chinese 1.



XIAMEN UNIVERSITY MALAYSIA DULN009(B)

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The information in this brochure is correct at the time of publication. Xiamen University Malaysia (XMUM) reserves the right to change the information in line with updates from time to time. Please check the website (www.xmu.edu.my) for latest information.

September 2025