



MASTER IN NEW ENERGY SCIENCE AND ENGINEERING

KPT/JPS [N/522/7/0086] 08/25 [MQA/FA13686]

DURATION OF STUDY

Full-time

minimum 2 years, maximum 3 years

Part-time

minimum 3 years, maximum 4 years

INTAKE

The first week of every month
throughout the year

MEDIUM OF INSTRUCTION

English

ABOUT THE PROGRAMME

In Xiamen University Malaysia (XMUM), the Master in New Energy Science and Engineering is a full research mode programme offered with the focus of energy related disciplines such as energy novel 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 energy materials/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

- A Bachelor's Degree in related science or engineering discipline with a minimum CGPA of 2.75; OR
- A Bachelor's Degree in related science or engineering discipline with a minimum CGPA of 2.50 but below 2.75 will be subjected to internal assessment; OR
- A Bachelor's Degree in related science or engineering discipline with a CGPA below 2.50, can be accepted subjected to a minimum of 5 years of relevant working experience; OR
- Any other equivalent qualifications recognised by the Malaysian Government and accepted by the Senate.

English proficiency requirement for International Students: IELTS 5.0/ CEFR High B1/ TOEFL with TOEFL Essentials (Online) 7.5 or TOEFL IBT: 40/ Cambridge English Qualifications 154/ PTE 47/ ELS 107/ MUET Band 3.5

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

MAIN COURSES

- Research Methodology
- Graduate Seminar
- Research Thesis
- Chinese 1*
- Selected Topics on China

* Students with credits in Chinese courses in previous result slips (UPSR/STPM/UEC /A-Level/Foundation/Matriculation/Diploma/SPM/O-Level/HSK, etc.) can be exempted from Chinese 1.



XIAMEN UNIVERSITY MALAYSIA DULN009(B)

TEL : +603 7610 2079

FAX : +603 7610 2068

E-MAIL : enquiry@xmu.edu.my

WEBSITE : www.xmu.edu.my

CAMPUS ADDRESS : Jalan Sunsuria, Bandar Sunsuria, 43900 Sepang, Selangor Darul Ehsan, Malaysia



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.

November 2023