

PROGRAMME OVERVIEW

DEGREE PROGRAMME
MSc Sustainable Energy Technology

AWARDING INSTITUTION
University of Liverpool, UK
The full-time programme is also recognised by the Chinese Ministry of Education.

TUITION FEE
RMB 90,000

PROGRAMME DURATION
18 months, full time

SCHOLARSHIPS
Scholarships of up to 50% are available for our full-time programmes. For details, please visit:
www.xjtlu.edu.cn/en/study-with-us/admissions/scholarships

ALUMNI DISCOUNT
If you are a graduate of XJTLU, the University of Liverpool or Xi'an Jiaotong University, you will automatically receive a discount of 20% of the tuition fee.

ENTRY REQUIREMENTS

UNDERGRADUATE BACKGROUND
An undergraduate degree (UK 2:1 or equivalent) in a relevant field such as electrical engineering, electronic science and technology, telecommunication engineering, computer science and technology, mathematics, semiconductor physics, automation and control, embedded systems, engineering thermal physics or other related disciplines.

UK
Upper second class (2:1) honours

CHINA
1st tier universities: 75% or above
2nd tier universities: 80% or above
Chinese applicants are not required to take the Ministry of Education postgraduate entrance exam.

NORTH AMERICA
3.0 Cumulative GPA (out of 4) or
3.2 Cumulative GPA in the final two years of your undergraduate programme

OTHER REGIONS
Equivalent academic qualifications

ENGLISH REQUIREMENTS
IELTS: 6.0 (minimum of 5.0 in all sections) / TOEFL iBT: 80 (or equivalent)

If you miss the English language requirements by 0.5-1.0 of an IELTS band, or a similar number for other English language exams, you can be admitted to the programme after successful completion of our four- or six-week intensive English preessional course.

The University reserves the right to modify programmes at any time in response to unforeseen circumstances, feedback and review. The University also reserves the right to not offer programmes with low enrolments. For the latest information, please visit our website.

HOW TO APPLY

PREPARING TO APPLY

Make sure you have prepared the following documents to upload onto the application system. Documents required for application include:

- Certificates of education qualifications and transcripts, translated into English
- Personal statement
- Two letters of reference
- Certificates of English language qualifications such as IELTS, TOEFL or other acceptable English qualifications (where required)
- Scholarship statement (if applying for the XJTLU scholarship)

We reserve the right to request additional documents or an interview to assess your academic qualifications.

APPLY ONLINE

All applicants should apply via our online application system:

1. Choose your programme from www.xjtlu.edu.cn/en/find-a-programme
2. Click/tap 'Apply' on the programme page
3. Create an account or log in to your existing account
4. Complete your application.

Upload the required documents (mentioned above) to the corresponding fields. You may log-in to view your application form at any time and upload any remaining supporting documents.

After submitting your application successfully, you will receive an acknowledgement email from pgadmissions@xjtlu.edu.cn. If you do not receive the confirmation email or experience any difficulties during the online application process, please send us an email with specific details of the problem.

www.xjtlu.edu.cn/en/study-with-us/admissions/how-to-apply

APPLICATION DEADLINES

- 30 June 2018 (International applicants)
- 31 July 2018 (Chinese nationals)

MSc

SUSTAINABLE

ENERGY

TECHNOLOGY

可持续能源

技术硕士

可持续能源技术硕士

本硕士项目为学生提供关于可持续能源生产、分配和消费领域的最先进的教育。它的设立旨在解决在可再生能源、智能电网和可持续发展等领域急需高水准工程师的这一现状。

本项目的硕士毕业生将对应用于建筑、城市设计及其它领域的各种可持续能源、智能电网、电力电子和能源管理方面的可持续性标准等有全面的了解。同时，可持续能源技术的研究及发展同时会在工业、政府机构和研究中心等开辟众多就业机会。

毕业生将获得:

- 在享有全球声誉的国际性大学的学习机会;
- 与世界著名大学和研究中心紧密合作, 解决诸如能源危机和环境污染等重大技术难题;
- 绝佳的研究机会, 实验室配备先进的实验设备, 其中包括网络分析仪, 功率分析仪, 数字空间控制器和风力发电机和光伏测试系统等;
- 不断优化的核心课程设置以满足产业创新的要求;
- 最前沿的研究课题包括太阳能、风能和其它可再生能源的智能化和高效利用。

实验室设备

- 配备有先进实验设备的电力电子实验室;
- 配备有先进实验设备的可持续能源实验室, 其中包括1个600瓦的风力机、2个270瓦的太阳能电池组件、蓄电池、1个正弦逆变器输出的逆变器及其主控制器;
- 电机和电力系统实验室。

本科为电气工程、电子科学与技术、通信工程、计算机科学与技术、数学、半导体物理、自动化控制、嵌入系统、工程热物理等相关专业。

英语要求

雅思: 6.0及以上 (且各项成绩均不低于5.0)
托福iBT: 80

如果你的IELTS成绩比申请要求低0.5-1.0分之内 (TOEFL等其它英语水平测试同理), 可以选择参加西交利物浦大学组织的为期4-6周高强度的学前英语课程, 成功通过后将获得入学。

奖学金

西交利物浦大学为录取者提供充裕奖学金, 优秀学生可获得高达50%的学费优惠。如需申请西交利物浦大学研究生项目奖学金, 请在申请材料中附奖学金申请书, 并阐明申请优势与获奖理由。

www.xjtlu.edu.cn/zh/study-with-us/admissions/scholarships

www.xjtlu.edu.cn/zh/find-a-programme/masters/msc-sustainable-energy-technology



扫描二维码
获取更多专业信息

专业负责人
huiqing.wen@xjtlu.edu.cn

咨询邮箱
pgenquiries@xjtlu.edu.cn

在线申请
www.xjtlu.edu.cn/zh/find-a-programme/masters/msc-sustainable-energy-technology

MSc SUSTAINABLE ENERGY TECHNOLOGY

The MSc Sustainable Energy Technology programme provides state-of-the-art education in the fields of sustainable energy generation, distribution and consumption. It is intended to respond to a growing skills shortage of engineers with a high level of training in renewable energy, smart grids and sustainability.

By the time you graduate, you will have a thorough understanding of sustainability standards, various renewable energies, smart grid and power electronics for renewable energy and energy use management in buildings, urban design and other areas. Research on sustainable energy technology has opened up many job opportunities in industry, government institutions and research centres.

Lab facilities include:

- a power electronics laboratory equipped with advanced experimental equipment
- a sustainable energy laboratory equipped with advanced experimental equipment including a 600W wind turbine, two 270W solar modules, batteries, an inverter with sinusoidal output and main controller
- an electric machine and power system laboratory.

Graduates of this programme, as with all XJTLU masters degrees, earn a University of Liverpool degree that is recognised by the Chinese Ministry of Education.



SCAN THE QR CODE
TO VISIT THE
PROGRAMME
WEBSITE

PROGRAMME DIRECTOR
huiqing.wen@xjtlu.edu.cn

GENERAL ENQUIRIES
pgenquiries@xjtlu.edu.cn

APPLY
www.xjtlu.edu.cn/en/find-a-programme/masters/msc-sustainable-energy-technology

MODULES

- SUSTAINABLE ENERGY AND THE ENVIRONMENT
- NUCLEAR ENERGY TECHNOLOGY
- POWER SYSTEM NETWORK AND SMART GRIDS
- INTEGRATION OF ENERGY STRATEGIES IN THE DESIGN OF BUILDINGS
- PHOTOVOLTAIC ENERGY TECHNOLOGY
- RENEWABLE KINETIC ENERGY TECHNOLOGIES
- POWER ELECTRONICS AND APPLICATIONS FOR RENEWABLE ENERGY
- SUSTAINABLE URBAN PLANNING STRATEGIES
- DISSERTATION

ADDITIONAL LEARNING ACTIVITIES

The completion of additional learning activities is required to obtain your masters degree. Normally, required ALA hours will be distributed evenly across each semester, amounting to 200 hours per semester. Part-time programmes will normally require 100 to 150 hours per semester.

KNOWLEDGE AND SKILLS

- By studying MSc Sustainable Energy Technology you will benefit from:
- studying at an international university recognised throughout the world
 - close cooperation with world-famous universities and research centres to solve major technical challenges including energy crises and environmental pollution
 - excellent research opportunities, using advanced experimental equipment including a network analyser, power analyser, Dspace controller, wind turbine and PV testing system
 - continuous development of core modules to meet the requirements of industrial innovation
 - cutting-edge research in the intelligent and efficient utilisation of solar, wind energy and other renewable energy sources.

ACCREDITATION

This programme has been accredited by the Institution of Engineering and Technology (IET). IET is a leading professional organisation working to share and advance knowledge and promote science, engineering and technology across the world. Students graduating from this accredited programme can enjoy a more straightforward registration process for incorporated engineer (IEng) or chartered engineer (CEng) registration, important benchmarks professionally.



The Institution of
Engineering and Technology

CAREERS

Graduates of this programme will typically work on professional tasks including the implementation of sustainable energy technologies within existing or new systems, and modelling and evaluation of the impact on ecosystems, economics and society.

Graduates may be employed as electric power system engineers, electric power system consultants, electric power projects managers, sustainable cities and building design consultants, managers and team leaders in government.

XJTLU

MASTERS

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING 电气与电子工程系

The Department of Electrical and Electronic Engineering is committed to research and teaching excellence. Our highly qualified academic staff includes full professors, associate professors and lecturers. We aim to develop graduates who are competent in the fundamentals of electrical and electronic engineering with wider transferable skills in communication, team-working, organisational awareness and project management. Our students are able to meet the needs of a wide spectrum of employers both within and outside the specialised sector. Our strong research background has a positive impact on the quality of teaching - our students are exposed to the latest cutting-edge knowledge.

电气与电子工程系致力于追求卓越学术研究及教学水平。我系具备高质量学术人才, 由教授、副教授和讲师组成。我系以培养在电气与电子工程方面拥有足够竞争力, 在沟通、团队合作、组织意识和项目管理方面拥有广泛通用技能的毕业生为目标。不论是专业知识或非专业领域能力, 我系学生都能满足雇主的广泛需求。

XI'AN JIAOTONG-LIVERPOOL UNIVERSITY 西交利物浦大学

Xi'an Jiaotong-Liverpool University is the largest international joint venture university in China, combining the best of East and West, awarding English-taught University of Liverpool degrees.



“My module “Power Electronics and Applications for Renewable Energy” aims to give the you basic knowledge of the design and manner of operation of power electronic converters. You will gain a broad understanding of the vital role of power electronics in the power system, and how it may enhance energy saving, and also its connection with sustainable energy. Beside the lectures and tutorials, the mode of delivery of this module also includes 20 hours of laboratories which will be accomplished in our power electronics lab. Hence upon completing the module successfully you should have strong theoretical knowledge with practical skills.”

Dr WEN LIU
LECTURER
MSc SUSTAINABLE ENERGY TECHNOLOGY