

### PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Advanced Technology
Supervisors	Principal supervisor: Dr Lurui Fang (XJTLU) Co-supervisor: Professor Eng Gee Lim (XJTLU) Co-supervisor: Dr Lin Jiang (UoL) Co-supervisor: Professor Furong Li (University of Bath)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	The research on the impact of socio-economic development to power network expansion for developing countries
Contact	Please email <a href="mailto:Lurui.Fang@xjtlu.edu.cn">Lurui.Fang@xjtlu.edu.cn</a> (XJTLU principal supervisor's email address) with a subject line of the PhD project title.  The principal supervisor's profile is linked here: <a href="https://www.xjtlu.edu.cn/zh/departments/academic-departments/electrical-and-electronic-engineering/staff/lurui-fang">https://www.xjtlu.edu.cn/zh/departments/academic-departments/electrical-and-electronic-engineering/staff/lurui-fang</a>

#### **Requirements:**

The candidate should have a first-class or upper second class honours degree, or a master's degree (or equivalent qualification), in Electrical Engineering, Applied Mathematics, or Economics.

Evidence of good spoken and written English is essential. The candidate should have an IELTS score of **6.5 or above** if the first language is not English. This position is open to all qualified candidates irrespective of nationality.

#### **Degree:**

The student will be awarded a PhD degree from the University of Liverpool (UK) upon successful completion of the program.

#### **Funding:**

The PhD studentship is available for three years subject to satisfactory progress by the student. The award covers tuition fees for three years (currently equivalent to RMB 99,000 per annum). It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. The scholarship holder is expected to carry out the major part of his or her research at XJTLU in Suzhou, China. However, he or she is eligible for a research study visit to the University of Liverpool up to six months, if this is required by the project.

**Project Description:**

Power system planning is never a short-run problem. It normally considers socio-economic development, total energy consumption, and power engineering development. Nowadays, achieving carbon neutrality brings drastic challenges to developing countries, which inherently perform greater uncertainties of demand variation than developed countries in the long run.

In China, after the mass population has gotten rid of extreme poverty in 2020, the next government target is achieving common prosperity, where industrializing unadvanced regions is the key. This implies electricity demand across different regions would have a significant change in the long term.

Where is the direction of demand variation for developing countries? What would be the future network expansion pathway under the carbon-neutral target?

The successful candidate will unveil the mist behind these problems with the support of me and the supervision team.

For more information about doctoral scholarship and PhD programme at Xi'an Jiaotong-Liverpool University (XJTLU), please visit

<https://www.xjtlu.edu.cn/en/admissions/global/entry-requirements/>

<https://www.xjtlu.edu.cn/en/admissions/global/fees-and-scholarship>

**How to Apply:**

Interested applicants are advised to email Lurui.Fang@xjtlu.edu.cn (XJTLU principal supervisor's email address) the following documents for initial review and assessment (please put the project title in the subject line).

- CV
- Two formal reference letters
- Personal statement outlining your interest in the position
- Certificates of English language qualifications (IELTS or equivalent)
- Full academic transcripts in both Chinese and English (for international students, only the English version is required)
- Verified certificates of education qualifications in both Chinese and English (for international students, only the English version is required)
- PDF copy of Bachelor / Master Degree dissertation (or an equivalent writing sample) and examiner reports available