

PhD studentship (Full-time)

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| Institution | Xi'an Jiaotong-Liverpool University, China |
| School | School of Advanced Technology |
| Supervisors | <p><i>Please list all the names in the supervisory team. It should be consistent with the information on your approved PGRS proposal.</i></p> <p>Principal supervisor: Professor Huiqing Wen (XJTLU) Co-supervisor: Dr Wen Liu (XJTLU) Co-supervisor: Dr Jiafeng Zhou (UoL)</p> |
| Application Deadline | Open until the position is filled |
| Funding Availability | Funded PhD project (world-wide students) |
| Project Title | High-voltage and low leakage current AlGaIn/GaN Fin-HEMTs |
| Contact | Please email Huiqing.Wen@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title |

Requirements:

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in *Microelectronics or Power Electronics*. 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) and provides a monthly stipend of 5,000 RMB as a contribution to living expenses. It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. It is a condition of the award that holders of XJTLU PhD scholarships carry out 300-500 hours of teaching assistance work per year. 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 of up to six months, if this is required by the project.

Project Description:

This project mainly develops enhanced GaN power devices with high voltage and low leakage current, tests the static and dynamic characteristics at high temperature and high frequency, and studies the forward and reverse conduction voltage drop and influencing factors. The project will study the power integration technology of high-voltage GaN devices and low-voltage drive protection circuits, and evaluate the actual performance of power integration technology based on GaN materials in terms of integration degree, circuit complexity, temperature range, power level and drive capability. By designing high reliability power electronic intelligent power integration modules, this project is expected to promote the technological development of smart grids and renewable energy related fields.

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 **Huiqing.Wen@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 reference letters with company/university letterhead
- Personal statement outlining your interest in the position
- Proof of English language proficiency (an IELTS score of 6.5 or above)
- Verified school 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 Master Degree dissertation (or an equivalent writing sample) and examiners reports available

Informal enquiries may be addressed to **Professor Huiqing Wen** (**Huiqing.Wen@xjtlu.edu.cn**), whose personal profile is linked below,

<https://www.xjtlu.edu.cn/en/study/departments/school-of-advanced-technology/electrical-and-electronic-engineering/department-staff/academic-staff/staff/huiqing-wen>