

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Advanced Technology
Supervisors	<i>Please list all the names in the supervisory team. It should be consistent with the information on your approved PGRS proposal.</i> Principal supervisor: /Dr. Mark Leach (XJTLU) Co-supervisor: Prof. Enggee Lim.(XJTLU) Co-Supervisor: Dr. Jingchen Wang (XJTLU) Co-supervisor: /Dr Yi Huang.(UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Wireless power and communication for implantable applications
Contact	Please email mark.leach@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title. The principal supervisor's profile is linked here: https://www.xjtlu.edu.cn/en/departments/academic-departments/school-of-advanced-technology/staff/mark-leach

Requirements:

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in Telecommunications Engineering /Microelectronics/ Electronics and Information Engineering.

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 80,000 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:

The number and types of implantable electronic devices are expanding rapidly with the growth of body area networks, such as nerve stimulators, glucose monitoring sensors and capsule endoscopes. The batteries in these devices need to be replaced surgically when they become depleted. Typically, a patient will need to stay in hospital for a few days due to potential risks associated with the surgery. This project will develop techniques to wirelessly charge implanted device batteries to extend operation lifespan. Many of these devices are also programmable and as such developing a system which can communicate with and charge an implanted device simultaneously is desirable.

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.....@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 Master Degree dissertation (or an equivalent writing sample) and examiners reports available