

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Civil Engineering
Supervisors	Principle supervisor: Dr. Hyungjoon Seo (Xi'an Jiaotong-Liverpool University) Co-supervisor: Dr. Ryan Judge (University of Liverpool, UK)
Application Deadline	11 th June 2017
Funding Availability	Funded PhD project (world-wide students)
Project Title	Development and Application of SMART Monitoring System (Fibre optic, 3D Camera, laser scanning, and infrared camera) in Infrastructure
Contact	Please email hyungjoon.seo@xjtlu.edu.cn (principal supervisor's email address) and copy doctoralstudies@xjtlu.edu.cn 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 Civil Engineering or related area. Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 or above, or an equivalent qualification, 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) and provides a monthly stipend of 3500 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 three months, if this is required by the project.

Project Description:

This project is mainly focused on the geotechnical structures. For structures interacting with soil (e.g. underground infrastructure such as foundations, tunnels or pipelines), the ground loads are distributed spatially (i.e. not point loads) and hence the state of the structure will be better understood if the complete in situ strain regime (or displacement profile) is known. For example, an innovative distributed fibre optic strain measurement system allows having thousands of “strain gauges” along a single cable connected to structures, embedded in soil or grouted into boreholes. Because of the simple and quick installation technique, distributed optical fibre sensing can be as practical as the other conventional measurements. However, development of innovative sensors is still in its beginning stages. Therefore, the purpose of this project is to develop the SMART monitoring system and to apply this monitoring system to real construction sites or laboratory test to evaluate the usability in field condition. It will be better, if you have following skills: lab or field test experiences; data analysis; programming; numerical simulations.

For more information about doctoral scholarship and PhD programme at Xi’an Jiaotong-Liverpool University (XJTLU): Please visit

<http://www.xjtlu.edu.cn/en/admissions/phd.html>

<http://www.xjtlu.edu.cn/en/admissions/phd/feescholarships.html>

How to Apply:

Interested applicants are advised to email hyungjoon.seo@xjtlu.edu.cn (principal supervisor’s email address) with **CV**.

If you will be the candidate for this position, you should provide the following documents and copy doctoralstudies@xjtlu.edu.cn (please put the project title in the subject line).

- CV
- Two reference letters
- Personal statement outlining your interest in the position
- Proof of English language proficiency (an IELTS score of above 6.5 or equivalent is required)
- 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)

Informal enquiries may be addressed to Dr. Hyungjoon Seo (hyungjoon.seo@xjtlu.edu.cn), whose personal profile is linked below,

<http://www.xjtlu.edu.cn/en/faculty/hyungjoon-seo>