

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Civil Engineering
Supervisors	Principle supervisor: Dr. Fangyu Guo (XJTLU, Department of Civil Engineering) Co-supervisor: Dr. Cheng Zhang (XJTLU, Department of Civil Engineering) Co-supervisor: Dr. Jianli Hao (XJTLU, Department of Civil Engineering) Co-supervisor: Professor Dirk Schaefer (UoL, Department of Industrial Design)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	English title: A roadmap for applying Civil Integrated Management related technologies to civil infrastructure projects in China Chinese title: 将土木综合管理 (CIM) 概念及相关技术运用于中国土木基础设施项目的路线图
Contact	Please email Fangyu.guo@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 construction engineering related degree. 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) 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 three months, if this is required by the project.

Project Description:

As various technologies and tools have been introduced to the civil infrastructure projects in advanced countries, the traditional paper-based project delivery has been gradually transitioned into 3D digital data-based project delivery. The traditional workflow and organizational culture also needs to be adjusted to accommodate this change. Accordingly, a newly developed concept Civil Integrated Management (CIM), focuses on "the technology-enabled collection, organization, managed accessibility, and the use of accurate data and information throughout the lifecycle of a transportation asset". The enabling technologies under the CIM umbrella include GIS, Light Detection and Ranging (LiDAR), 3D engineered models, Automatic Machine Guidance (AMG), intelligent compaction, mobile devices, electronic document management system, etc. With the rapid development of the Chinese civil infrastructure, there is a need for building and managing the civil infrastructure assets in an effective and sustainable manner. Therefore, it is necessary to investigate what CIM-related technologies could be suitable for the civil infrastructure projects in China and to develop a roadmap for guiding the use of such technologies in the whole project lifecycle. In addition, strategies would be also developed for better accommodating the change resulting from the use of these technologies (e.g. mitigating employee's resistance to change).

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

<http://www.xjtlu.edu.cn/en/study-with-us/admissions/entry-requirements>

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

How to Apply:

Interested applicants are advised to email Fangyu.guo@xjtlu.edu.cn 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 Dr. Fangyu Guo (Fangyu.guo@xjtlu.edu.cn), whose personal profile is linked below, <https://www.xjtlu.edu.cn/en/departments/academic-departments/civil-engineering/staff/fangyu-guo>