

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Architecture
Supervisors	Principle supervisor: Dr. Christiane M. Herr (XJTLU, Architecture Department) Co-supervisor: Dr. Thomas Fischer (XJTLU, Architecture Department) Co-supervisor: Dr. Davide Lombardi (XJTLU, Architecture Department) Co-supervisor: Professor Andre Brown (UoL, Architecture Department)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	A Parametric Form Language for Fibre Reinforced Concrete Prefabricated Elements Using 3D Printed Formwork -纤维混凝土预制构件 3D 打印模板参数化形态语言研究
Contact	Please email Christiane.Herr@xjtlu.edu.cn (XJTLU 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 architecture related disciplines. 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 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:

Responding to recent developments in digital design and fabrication, this project focuses on parametrically designed prefabricated architectural elements employing fibre reinforced concrete and 3D printing construction technologies. By examining in detail the relationships of digital design, advanced materials and digital fabrication, the study aims to enable and inform structural evaluation and construction of digitally designed structures on larger scales in the future.

The structural performance and constructive feasibility of new types of construction elements, employing new types and combinations of materials, is not yet well understood and thus leads to either strict limitation of such structures to interior design scales or heavy handed engineering solutions that negatively affect the potential architectural outcomes. The proposed study addresses this gap in current research through a systematic study of the relationships between parametrically designed and prefabricated building components, fibre reinforced concrete and structural performance.

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/entry-requirements.html>

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

How to Apply:

Interested applicants are advised to email Christiane.Herr@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)

Informal enquiries may be addressed to Dr. Christiane M. Herr (Christiane.Herr@xjtlu.edu.cn), whose personal profile is linked below, <http://www.xjtlu.edu.cn/en/departments/academic-departments/architecture/staff/christiane-margerita-herr>