

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Civil Engineering
Supervisors	Principle supervisor: Dr. Tjalfe Poulsen (Xi'an Jiaotong-Liverpool University) Co-supervisor: Dr. Steve Barrett(University of Liverpool, UK);
Application Deadline	Open until the position is filled.
Funding Availability	Funded PhD project (world-wide students)
Project Title	Anisotropic critical state theory based constitutive modeling of soil accounting for the influence of internal structure 基于各向异性临界状态理论和考虑内结构影响的土体本构模拟
Contact	Please email Tjalfe.Poulsen@xjtlu.edu.cn (principle 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 a closely related subject. 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. Experience in programming would be beneficial.

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:

During this research project the successful candidate will be expected to work on the identification, analysis and correlation of soil microstructure with soil engineering behaviour. The project aims at developing a sophisticated constitutive model for geotechnical materials within the framework of the newly developed anisotropic critical state theory, considering the influence of fabric/internal structures of the soils. Thus, the successful candidate will need to consider both initial soil fabrics, and mechanisms of evolution of those fabrics during testing.

In Summary, the successful candidate will need to carry out, soil sampling, imaging and image analysis, geotechnical laboratory testing, DEM analysis, and geotechnical modeling.

This project is the result of a collaboration between XJTLU, the University of Liverpool, and Zhejiang University, and is supported by a national research grant NSFC No. 51578499.

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 Tjalfe.Poulsen@xjtlu.edu. 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. Tjalfe Poulsen (Tjalfe.Poulsen@xjtlu.edu), whose personal profile is linked below, <http://academic.xjtlu.edu.cn/civeng/Staff/tjalfe-poulsen>