

Three-Year Study Plan for MSc in Geotechnical Engineering at Jiangsu University, China

Year 1: Language Preparation and Adaptation (1st September 2025 – 30th June 2026)

In order to improve communication skills and adjust to the local culture, the first academic year will be devoted to earning HSK (Hanyu Shuiping Kaoshi) certification. This will guarantee a seamless transfer to the primary coursework. To reach HSK Level 3 or 4, students must attend daily sessions that involve speaking, writing, listening, and reading. Involvement in cultural exchange events and initiatives run by the institution. Knowledge of the department, the work of the instructors, and the standards for research methods.

Year 2: Taught Coursework (1st September 2026 – 30th June 2027)

Advanced geotechnical engineering concepts and methods will be covered in the second year, with an emphasis on theoretical understanding and its real-world applications. It is anticipated that students would finish both individual and group projects, attend seminars, and work on a small project related to actual geotechnical problems throughout this year.

Proposed Course Outline:

1. Advanced Soil Mechanics
2. Rock Mechanics and Engineering
3. Foundation Engineering
4. Geotechnical Analysis and Design
5. Numerical Methods in Geotechnical Engineering
6. Geotechnical Earthquake Engineering
7. Hydrogeology and Groundwater Engineering
8. Geoenvironmental Engineering
9. Research Methodology and Technical Writing

Year 3: Research and Thesis Work (1st September 2027 – 30th June 2028)

Under the direction of academics in the Department of Civil Engineering, the last year will be devoted to research.

Research Focus Areas with Professors:

- **Prof. Chuanxun Li:** Study of *advanced foundation systems* and applications of geotechnical instrumentation.
- **Prof. Yonghong Miao:** Investigation into *ground improvement techniques* and the use of numerical methods in soil-structure interaction.
- **Prof. Yulong Zheng:** Exploration of *landslide mechanics* and innovative approaches to slope stabilization.

Proposed Research Topics:

1. *Evaluation of Soil-Structure Interaction in Seismic Zones Using Numerical Modeling Techniques.*
2. *Innovative Ground Improvement Techniques for Weak Soils in Urban Development.*
3. *Risk Assessment and Stabilization Techniques for Landslides in Geologically Sensitive Areas.*

Activities To My Coursework:

- Conducting experiments and fieldwork related to selected research topics.
- Participation in conferences, seminars, webinars and workshops to present findings.
- Writing and defending the thesis before an academic panel.

Conclusion

This thorough study plan, which clearly progresses from language proficiency to technical skill and research capacity, is in line with the academic and professional objectives of pursuing advanced knowledge in geotechnical engineering. Working with Professors Yulong Zheng, Yonghong Miao, and Chuanxun Li will provide the chance to support creative geotechnical engineering solutions.