MS in Geotechnical Engineering

Transformative Education • Innovative Engineering • Problem Solving

- · Join a new generations of geotechnical engineers
- Experience a broad curriculum in theory and practice
- · Learn cutting-edge analysis and design techniques
- Evaluate and mitigate natural hazards
- Design for underground space for urban development and renewal
- · Create geo-structures for the future
- Make industry contacts and network through seminars and career fairs







WHY YOU SHOULD APPLY: Geotechnical Engineers lead in the creation and improvement of infrastructure above and below ground and in the evaluation and mitigation of natural hazards. Engineers must learn fundamental soil mechanics principles and innovative geo-technologies to create adaptive, resilient, and sustainable infrastructure systems. The MS curriculum in Geotechnical Engineering at Northwestern provides the tools and methods for this process through a series of 12 courses.

HOW TO APPLY: APPLY AT WWW.APPLYWEB.COM/NUGRAD/INDEX.FTL

APPLICATIONS ARE DUE AT THE END OF FALL TERM. DECISIONS WILL BE MADE AND APPLICANTS WILL BE NOTIFIED STARTING IN FEBRUARY.

EMAIL QUESTIONS TO: MS_GEO@NORTHWESTERN.EDU, FIND US ON TWITTER @CEE_NWU

MS IN GEO @ NU

CIVIL AND ENVIRONMENTAL ENGINEERING

Designing Urban Infrastructure and Mitigating Natural Hazards

The MS in Geotechnical Engineering at Northwestern prepares graduates with sound fundamentals necessary to become creative geotechnical consultants and designers, capable of addressing the wide range of issues arising from the development and maintenance of sustainable infrastructure systems and mitigating natural hazards.

The program builds on strengths of the world-renowned faculty and elite Chicago-based geotechnical consulting firms and specialty contractors. Core courses are complemented with design courses and projects taught by design professionals from firms such as Hayward Baker, Geosyntec Consultants, and Tumer Construction

GEO Fundamentals Series of 6 courses designed to provide students with the core knowledge required to for geotechnical practice. They encompass: soil mechanics, soil dynamics, unsaturated soil mechanics, groundwater, computational plasticity and limit analysis, and constitutive modeling of soils

Geotechnical Analysis and Design GEO students supplement their fundamentals with six courses: foundation engineering, earth retaining structures and slope stability, engineering properties of soils, underground construction, ground improvements, LRFD in geotechnics, computational geotechnics, case studies in geotechnical engineering, structural design, numerical analyses, and comprehensive design project.

Seminars & Career Fair GEO students participate in special professional development seminars, which includes a project presentations by geotechnical engineers and specialty contractors, as well as a resume workshop hosted by engineers. The department organizes two career fairs to connect students to employers.

Alumni Network GEO alumni hold geotechnical positions in Chicagoland and across the U.S., with employers like Geosyntec Consultants, GEI Consultants, Mueser Rutledge Consulting Engineers, Hayward Baker, Inc., AECOM and Jacobs. An annual alumni panel features graduates of the program sharing their engineering experience.

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