Why GRADUATE STUDIES in GEOENGINEERING?

Unique in North America, the GeoEngineering program is a collaboration between faculty members at Queen's University and the Royal Military College (RMC). Drawn from three engineering departments at the two universities, the GeoEngineering Centre’s members are dedicated to advancing knowledge in geotechnical, geohydrological, geochemical and geosynthetics engineering.

The program links three accredited graduate programs to provide shared learning experiences with interdisciplinary content: Civil Engineering (Queen's); Geological Sciences & Geological Engineering (Queen's); and Civil Engineering (RMC).

Through the development of collaborative research projects, with involvement of government and industrial partners, the GeoEngineering Centre provides exciting opportunities for graduate student researchers in specialized or multi-disciplinary fields of interest.

Why QUEEN’S?

We bring together students from a variety of backgrounds to take advantage of unique world class facilities and the largest GeoEngineering faculty in North America. Graduate students have opportunities to engage in innovative cross-disciplinary training and partnerships with research and industry leaders. Most of our faculty are involved in collaborative projects with industrial partners, made possible through University and industry research funding, which add further prestige to the program.

Program STRUCTURE

MASc
• 2 years full time, coursework + thesis.

PhD
• 3-4 years full time, coursework + thesis.

All students take the GeoEngineering Graduate Seminar (2 terms for MASc/4 terms for PhD), one GeoEngineering course from outside of their home department, and undertake at least 20% of selected coursework in GeoEngineering from their home department.

RESEARCH Areas

• Hydrogeology: research on the behaviour and remediation of contaminants in groundwater.

• Geotechnical Engineering: applying soil mechanics, rock mechanics and engineering geology to solve soil and rock engineering problems.

• Geoenvironmental Engineering: applying geotechnical engineering, hydrgrogeology and geochemistry to solve environmental problems related to soil and water pollution.

• Geomechanics: applying soil and rock mechanics, materials science, and mathematics to the solution of geoenengineering problems.

• Geosynthetics: researching and developing planar, polymeric materials used in contact with soil, rock and other geotechnical materials in civil engineering applications.

• Geochemistry: researching chemical composition and interaction of earth materials such as natural and contaminated waters, sediments, and rocks.
Application FAQs

What do I need to know to APPLY?

Students must first be admitted to one of the three participating graduate programs and have a thesis supervisor connected with the GeoEngineering Centre. Students must satisfy the admissions, coursework, thesis, and other requirements of the specific program in which they are enrolled.

Students seeking enrolment in the GeoEngineering program must obtain and complete the GeoEngineering enrolment form and return it to the Executive Director of the GeoEngineering Centre at Queen’s-RMC. Applications are accepted at any time and all eligible students are immediately accepted into the program. Students should then register through SOLUS in the GENG840 core course.

What about FUNDING?

For information about funding, please consult with your home department. Full-time students are encouraged to seek external financial support and to apply through Queen’s for funding from NSERC, OGS, ConeTec, and other sources.