Graduate Studies in Civil and Environmental Engineering



Why study Civil and Environmental Engineering at Western?

The Department of Civil and Environmental Engineering is dedicated to educating its students by providing them with the necessary tools and programs to ensure that our society enjoys a safer environment and a higher standard of living. Our faculty and staff work hard to expand this basic knowledge through high-quality teaching, excellent research and international co-operation to create a better world.

Our research centers and institutes actively participate in the delivery of our graduate programs. Our department is globally recongized in the field of wind engineering, particularly for leading-edge research conducted at the Boundary Layer Wind Tunnel Laboratory and the newly established Wind Engineering, Energy and Environment (WindEEE) Research Institute. The structural engineering group has a strong international reputation through extensive research productivity and service in many national and international professional, scientific, and code committees. Another area of strength is the internationally renowned Geotechnical Research Centre. The structural and geotechnical researchers also benefit from the research conducted at the Institute for Catastrophic Loss Reduction and the Insurance Research Lab for Better Homes.

Our graduate training in Environmental and Water Resources Engineering is supported by the efforts led by the Institute for Catastrophic Loss Reduction and the Research for Subsurface Transport and Remediation (RESTORE) groups. Our renowned faculty members have introduced state-of-the-art research methodology (from their own studies) into the graduate curricula and the inclusion of real-world problems, case studies and field activities in several of our courses. These courses will provide students with experience working with practicing engineers and scientists, and the opportunity to develop excellent communication skills.

Degree Options

- Master of Engineering (MEng)
- Master of Engineering Science (MESc)
- Doctor of Philosophy (PhD)





Areas of specialization

Environmental and Water Resources

Research includes: soil and ground water contamination; electrokinetic dewatering; coupled liquid, vapor and heat transfer in soils; industrial and mining waste recycling; landfill leachate treatment; biological treatment of wastewater; interaction of aggressive chemicals with liners; neural nets and fuzzy sets for water resources management; water resources system modeling; and hydropower optimization.

Geotechnical and Geoenvironmental

Research includes: tunneling and underground structures; dynamics of soils and foundations; design, analysis and construction of piles; machine foundation; unsaturated soil behaviour; waste geotechnics; well bore stability; landslides prevention and mitigation; strengthening of offshore foundation; safety assessment of dams and slopes; and design of buried concrete pipes.

Structural and Infrastructural

Research includes: effect of extreme wind events on structures; structural safety and code calibration, structural control; seismic evaluation and rehabilitation of structures; concrete technology; application of composite and smart materials; pipe lines analysis and design; bridge assessment and rehabilitation; modular steel structures; fracture mechanics; and risk and reliability.

Wind Engineering and Environmental Fluid Mechanics

Research includes: behaviour of tall buildings and long span bridges in wind; damping of structures; wind loading on low-rise buildings; modelling and testing of structures under tornadoes and downbursts; design of cladding against wind-driven rain; performance of full-scale structures; computational fluid dynamics; and bluff body aerodynamics.

Civil and Environmental Engineering Spencer Engineering Building, Room 3010 London, ON N6A 5B9 T: 519.850.2943 E: civilgrad@uwo.ca eng.uwo.ca/civil

Degree options

Master of Engineering (MEng)

- Admission average: Minimum 70%
- Project based: Eight graduate courses and a research project
- Time to complete: Minimum
 one year (three terms)

Master of Engineering Science (MESc)

- Admission average: Minimum 78%
- Funded program (supervisor required)
- Time to complete: Two years
 (six terms)

Doctor of Philosophy (PhD)

- Admission average: Minimum 78%
- Funded program (supervisor required)
- Eight graduate courses and a thesis
- Time to complete: Four years (12 terms)

How to Apply

- 1. Complete the online application
- 2. Submit letters of reference
- 3. Submit any supplementary documents
- Academic records/ transcripts
- English Language
 Proficiency (if applicable)
- 4. Pay the application fee (\$100 CAD)

Check with the department's Graduate Office at civilgrad@uwo.ca for application deadlines.