SMITH ENGINEERING Queen's University Civil Engineering

DEPARTMENT OF CIVIL ENGINEERING
STEPHEN J.R. SMITH FACULTY OF ENGINEERING AND APPLIED SCIENCE

TEACHING FELLOW POSITION AVAILABLE

CIVL WEEK 2 TEACHING ACTIVITIES FOR CIVL 215, CIVL 222, CIVL 231, CIVL 250
Academic Year 2025/26

Posting Date: November 11, 2025
Closing Date: November 19, 2025
Start date: January 1, 2026 and end date: April 30, 2026
1 position/1 section per course available

The Department of Civil Engineering in the Stephen J.R. Smith Faculty of Engineering and Applied Science at Queen's University invites applications from suitably qualified candidates interested in teaching the following undergraduate course in the 2025-26 session.

Qualifications:
Minimum of one year's study at the level of MASc. (or equivalent research or industry design experience). Previous educational background and/or experience must be suited to teaching the course described below. Candidates must have excellent communication and presentation skills, as well as be capable of working as a member of a teaching team. Registration as a Professional Engineer, or eligibility to acquire registration in Canada, would be a strong asset. Prior teaching experience in project-based engineering courses and lecture-based engineering courses would be an asset. **Open to Graduate Students only**.

Additional Required Qualifications:

- Experience with hydrodynamic simulations using MATLAB or Phyton for civil engineering applications
- Experience with organizing an intensive learning experience for students
- Great organizational skills
- Experience collaboratively designing course content with multiple instructors
- Previous experience with Civil Week 2 would be considered an asset

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Teaching Requirement:

CIVL 215 Materials for Civil Engineers | Units: 4.50
The basic engineering properties, micro/macro structure, behaviour and applications of various civil engineering materials will be studied including materials used in structural engineering, hydrotechnical engineering, geotechnical engineering and environmental engineering. This will include concrete, steel, timber, polymers, composites and soil. Interaction between materials

will be examined. Laboratory experiments will be used to demonstrate material behaviour. PPE will be required for this course student's cost (see course materials for details)
(Lec: 3, Lab: 1, Tut: 0.5)

Requirements: Prerequisites: APSC 151 Corequisites: Exclusions:
Offering Term: W
CEAB Units:
Mathematics 0
Natural Sciences 12
Complementary Studies 0
Engineering Science 32
Engineering Design 10
Offering Faculty: Smith Engineering

Teaching Requirement:

CIVL 222 Numerical Methods Units: 5.00
This course introduces the basics of numerical analysis and the use of computer software (MATLAB) for civil engineering analysis. Error analysis, numerical differentiation and integration, root finding, derivation and numerical solution of partial differential equations using finite difference methods, and optimization are among the topics covered. All problems emphasize engineering applications.
(Lec: 4, Lab: 0, Tut: 1)

Requirements: Prerequisites: MTHE 224 (MATH 224) or MTHE 225 (MATH 225) or MTHE 226 (MATH 226) Corequisites: Exclusions:
Offering Term: W
CEAB Units:
Mathematics 45
Natural Sciences 0
Complementary Studies 0
Engineering Science 15
Engineering Design 0
Offering Faculty: Smith Engineering

Teaching Requirement:

CIVL 231 Solid Mechanics II W | 4.5
Shear and bending moment diagrams; Moment-area method; Introduction to statically indeterminate structures; Virtual work for beams and frames (determinate and indeterminate); Stress review, transformed sections, and combined loading; Stress-strain transformation (including Mohr's circle); Failure theories.
(Lec: 3, Lab: 0.5, Tut: 1)

Requirements: Prerequisites: CIVL 230 Corequisites: Exclusions:
Offering Term: W
CEAB Units:
Mathematics 0

Natural Sciences 0
Complementary Studies 0
Engineering Science 54
Engineering Design 0
Offering Faculty: Smith Engineering

Teaching Requirement:

CIVL 250 Hydraulics I Units: 4.00
Fluid properties, fluid statics, basic equations of fluid flow: Continuity, Momentum, Euler's Equation of Motion, Linear Momentum Equation and Bernoulli's Equation. Flow of real fluid in closed conduits: friction losses and local energy losses. Pipeline flows in engineering practice. PPE will be required for this course at student's cost (see course materials for details)
(Lec: 3, Lab: 0.5, Tut: 0.5)

Requirements: Prerequisites: APSC 172, APSC 174 Corequisites: Exclusions:
Offering Term: W
CEAB Units:
Mathematics 0
Natural Sciences 4
Complementary Studies 0
Engineering Science 22
Engineering Design 22
Offering Faculty: Smith Engineering

Definitions: Program and Course Symbols and Codes can be found here.

The above advertised activities will be taught on campus. Enrollment is expected to be approximately 105 students in **CIVL 215**, 193 in **CIVL 222**, 102 in **CIVL 231**, and 113 in **CIVL 250.** The successful applicant will have **100 percent** responsibility for the CIVL WEEK 2 teaching activities associated with these courses. Winter term classes begin January 5, 2026 and end April 6, 2026 while the CIVL WEEK 2 event will take place from March 30, 2026 to April 3, 2026.

COVID 19 On-Campus Requirements
Prior to May 1, 2022, the University required all students, faculty, staff, and visitors (including contractors) to declare their COVID-19 vaccination status and provide proof that they were fully vaccinated or had an approved accommodation to engage in in-person University activities. These requirements were suspended effective May 1, 2022, but the University may reinstate them at any point.

The University invites applications from all qualified individuals. Queen's is strongly committed to employment equity, diversity, and inclusion in the workplace and encourages applications from Black, racialized/visible minority and Indigenous people, women, persons with disabilities, and 2SLGBTQ+ persons. All qualified candidates are encouraged to apply; however, in accordance with Canadian immigration requirements, Canadian citizens and permanent residents of Canada will be given priority. Applications from all qualified candidates will be

considered in the applicant pool. In order to support your employment at Queen's, we require you to indicate whether or not you will need a work permit.

Teaching Fellows at Queen's University are governed by the Collective Agreement for Teaching Assistants and Teaching Fellows between PSAC Local 901 and Queen's University. Remuneration will be in accordance with the Collective Agreement, and appointments are subject to funding or enrolment criteria.
https://www.queensu.ca/facultyrelations/psac%20901-1/collective-agreements/MoAs/LoUs

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant's accessibility needs. If you require accommodation during the interview process, please contact: Susan Palo at susan.palo@queensu.ca.

Applications should include a complete and current curriculum vitae, a copy of your transcript(s); a statement of teaching experience, the names and contact details of two referees who may be contacted, and any other relevant materials the candidate wishes to submit for consideration. Applications can be submitted to the Civil Engineering Appointments Committee by e-mail to susan.palo@queensu.ca. Applications should arrive no later than **November 19, 2025**.