



**SMITH  
ENGINEERING**  
Queen's University

**Mechanical and  
Materials Engineering**

STEPHEN J.R. SMITH FACULTY OF ENGINEERING AND APPLIED SCIENCE AT QUEEN'S  
UNIVERSITY

Teaching Fellow Position  
Academic Year 2024-2025

Posting Date: June 1, 2024

Closing Date: June 30, 2024

The Department of Mechanical and Materials Engineering at Queen's University invites applications from suitably qualified candidates interested in teaching the following core second year undergraduate course in the 2024/25 session.

MECH 221 Solid Mechanics I  
September 1, 2024 - December 31, 2024

**Qualifications:**

Current enrollment in the PhD program in Mechanical Engineering or related field at Queen's University. Previous educational background and/or experience must be suited to teaching the course described below. Candidates must have excellent communication and presentation skills as proven with prior experience, as well as being capable of working as a member of a teaching team. Previous teaching experience at the University level, specifically large lecture-based engineering courses is considered an asset. Registration as a Professional Engineer, or eligibility to acquire registration in Canada, would be a strong asset.

**Course Description:**

Units: 3.5

Review of statics, forces and equilibrium, internal forces in simple structures and other material from first year. Further development of axial, torsion, shear and bending moment diagrams, and concepts of stress and strain. Introduction to mechanical properties of materials, centroids and moments of areas, axial stress, flexural stress, transverse shear stress, calculation of displacement by integration, combined loading, and stress transformation. This course is designed primarily for mechanical engineering students.

Requirements: Prerequisites: [APSC 111](#), [APSC 171](#), and [APSC 182](#) or permission of instructor

Corequisites: Exclusions: [CIVL 220](#), [CIVL 230](#)

**CEAB Units:**

Mathematics 0, Natural Sciences 0, Complementary Studies 0, Eng Science 42, Eng Design 0

**Course Details:**

This course involves in-person delivery of three lecture hours and one tutorial hour per week for twelve weeks.

Expected Enrolment (subject to change): 345 students.

The successful applicant will have 100% percent responsibility for this course. Graduate teaching assistants will be assigned to assist with tutorials and marking. Discussion with your graduate program supervisor should be obtained prior to application.

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.

Teaching Fellows at Queen's University are governed by a [Collective Agreement](#) between the University and the Public Service Alliance of Canada 901, Unit 1.

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 [mmeadmin@queensu.ca](mailto:mmeadmin@queensu.ca).

In accordance with Canadian immigration requirements, Canadian citizens and permanent residents of Canada will be given priority, including any qualified individuals who have a valid legal work status in Canada. Please indicate in your application if you have a valid legal work status in Canada. Applications that do not include this information will be deemed incomplete. Applications from all qualified candidates will be considered in the applicant pool.

Applications should include a complete and current curriculum vitae, a copy of your "unofficial" transcript, 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 MME Appointments Committee at the address below, or by e-mail to [mmeadmin@queensu.ca](mailto:mmeadmin@queensu.ca). Applications should arrive no later than June 30, 2024 at 11:59pm.

Mechanical and Materials Engineering (MME) Appointments Committee  
Department of Mechanical and Materials Engineering  
McLaughlin Hall, Room 201  
Queen's University, Kingston ON, K7L 3N6  
Tel. 613 533-2585