



**STEPHEN J.R. SMITH FACULTY OF ENGINEERING AND APPLIED SCIENCE  
AT QUEEN'S UNIVERSITY  
Teaching Fellow Position Available  
Academic Year 2025/26**

**Posting Date:** February 7, 2025

**Closing Date:** February 28, 2025

Smith Engineering invites applications from suitably qualified candidates interested in teaching the following undergraduate course in the 2025/26 session. This course is taught as an in-person Summer Bridging course for the Smith Engineering Bridge.

**MECH 229 Kinematics and Dynamics  
Summer 2025: Summer Bridge  
May 1, 2025 – August 31, 2025.**

**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 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:**

**MECH 229 Kinematics and Dynamics**

**Units: 3.5**

This course will cover the following topics in the field of dynamics. Kinematics of particles: planar and three-dimensional motion (rectilinear, curvilinear), choosing a coordinate system, conversions between systems, space curvilinear motion using vector derivatives, free and constrained paths, relative motion between particles. Kinetics of systems of particles: generalized Newton's Second Law, work and energy, impulse and momentum, conservation of energy and momentum, impact. Students will solve dynamics problems analytically and computationally in an active learning environment.

K3.5 (Lec: No, Lab: Yes, Tut: No)

**Requirements:** Prerequisites: [APSC 111](#), [APSC 172](#) Corequisites: Exclusions: [MECH 228](#)

**CEAB Units:**

Mathematics 0, Natural Sciences 11, Complementary Studies 0, Eng Science 31, Eng Design 0



### **Course Details:**

This course involves synchronous in-person delivery with active learning. Summer term classes begin Monday May 5th and end Friday July 25, 2025. The Summer term examination period is July 27 – August 3<sup>rd</sup>, 2025. More information on the Undergraduate Academic Plan can be found [here](#).

**Expected Enrolment (subject to change):** 40 students

The successful applicant will have 100% percent responsibility for this course. Graduate teaching assistant(s) may be assigned to assist with tutorials, labs and marking. Please discuss your interest in this role with your graduate program supervisor prior to application.

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/Aboriginal 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. Compensation for teaching the above course will be according to the Collective Agreement.

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).

To comply with Federal laws, the University is obliged to gather statistical information about how many applicants for each job vacancy are Canadian citizens/ permanent residents of Canada. Applicants need not identify their country of origin or citizenship; however, all applications must include one of the following statements: I am a Canadian citizen/permanent resident of Canada; OR, I am not a Canadian citizen/permanent resident of Canada. Applications that do not include this information will be deemed incomplete.



**SMITH  
ENGINEERING**  
Queen's University

**Mechanical and  
Materials Engineering**

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 February 28, 2025 at 11:59pm.

Mechanical and Materials Engineering (MME) Appointments Committee  
Department of Mechanical and Materials Engineering  
McLaughlin Hall, Room 201  
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