

TEACHING FELLOW POSITION AVAILABLE Academic Year 2023-24

Posting Date: June 1, 2023 **Closing Date**: July 4, 2023

1 position/1 section available, in person

The Department of Mechanical and Materials Engineering in the 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 2023-24 session.

The course will be taught in person with an expected enrollment of approximately 240 students. The successful applicant will have 100% percent responsibility for this course. Graduate teaching assistants will be assigned to assist with labs and marking.

MECH 203 Mathematical and Computational Tools for Mechanical Engineers II

January 2024 - April 2024

Qualifications:

Currently enrolled in the PhD program at Queen's in Mechanical Engineering or a related field, expertise in the field relevant to the course, and appropriate teaching 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 proven with prior experience. Prior teaching experience in a University environment, specifically large lecture-based engineering courses would be an asset. Registration as a Professional Engineer, or eligibility to acquire registration in Canada, would be a strong asset.

Course Description and Teaching Requirement:

MECH 203 Mathematical and Computational Tools for Mechanical Engineers II W | 3.5

This course will introduce numerical and statistical methods for the solution of engineering problems, to complement those discussed in MECH 202. The topics of the course will be presented through problems, models and applications relevant to the Mechanical Engineering Program. On completion of the course students will be able to: solve linear systems of equations; analyze random processes; perform local optimization and hypothesis testing; interpolate and fit discrete data sequences. Students will solve problems analytically and computationally in an active learning, tutorial environment. The course will include a design project.

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

Prerequisites: MECH 202 Corequisites: Exclusions: MTHE 225, MATH 225 and MTHE 272

Academic Units:

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

Program and Course Symbols and Codes can be found at https://calendar.engineering.queensu.ca/

Winter term classes begin January 8, 2024 and end April 8, 2024 while the examination period ends on April 30. Grading and final mark reconciliation may extend into the next month.

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. All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority.

Teaching Fellows at Queen's University are governed by the *Collective Agreement* between the Public Service Alliance of Canada (Local 901, unit 1) and the University, which is posted at: https://www.queensu.ca/facultyrelations/psac-901-1-Overview

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.

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 Gabrielle Whan, gabrielle.whan@queensu.ca

Applications should include a complete and current curriculum vitae, 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 Mechanical and Materials Engineering Appointments Committee by email to Gabrielle Whan, Department Manager at gabrielle.whan@queensu.ca or at the address below. Applications should arrive no later than **July 4**, **2023** at **5:00 pm.**

Mechanical and Materials Engineering Appointments Committee c/o Gabrielle Whan
Department of Mechanical and Materials Engineering
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