



DEPARTMENT OF
**Mechanical and
Materials Engineering**

**TERM ADJUNCT POSITION AVAILABLE
Academic Year 2023-24**

Posting Date: June 1, 2023

Closing Date: July 4, 2023

1 full position/1 section available, in person, position may be shared over 2 applicants

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 This course is partially co-taught with OT 887 - Environmental Determinates of Occupation II and includes a client-based team design project with the Engineering and OT students. Enrolment is expected to be 65 engineering students and 50 OT students. The successful applicant will have shared responsibility of the project module and 100% percent responsibility for the engineering portion of this course. Graduate teaching assistants will be assigned to assist with labs and marking.

MECH 393 Biomechanical Product Development

January 2024 – April 2024

Qualifications:

Minimum of a PhD 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. Registration as a Professional Engineer, or eligibility to acquire registration in Canada, is required. Prior teaching experience in a university environment, specifically large lecture-based engineering courses would be an asset.

Course Description and Teaching Requirement:

MECH 393 Biomechanical Product Development W | 3.5

This course focuses on design, manufacturing and product management of various implantable biomechanical devices, such as artificial joints, ligaments and various other external devices for persons with disabilities. Some aspects, such as the determination of the geometry and different sizes for artificial joints are product specific, while safety criteria, standards, rational choice of alternatives, design procedures and product management are applicable when designing a much larger variety of products. Much of the theory will be based on examples of artificial joints, and on external devices and instruments.

(Lec: 3, Lab: 0, Tut: 0.5)

Academic Units:

Mathematics 0 Natural Sciences 0 Complementary Studies 0 Eng Science 18 Eng Design 24

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.

The academic staff at Queen's University are governed by the *Collective Agreement* between the Queen's University Faculty Association (QUFA) and the University, which is posted at:

<https://www.queensu.ca/facultyrelations/queens-university-faculty-association-qufa/queens-qufa-collective-agreement>

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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