



**ROBERT M. BUCHAN DEPARTMENT OF MINING  
Teaching Fellow Position  
Academic Year Fall 2024**

**Posting Date:** Friday, May 31, 2024

**Closing Date:** 12noon, Wednesday, July 3, 2024

The Robert M. Buchan Department of Mining Engineering, Smith Engineering at Queen's University invites applications from suitably qualified candidates interested in teaching the following course for the fall 2024 session.

**MNTC 302 Engineering Physics  
September 1 to December 31, 2024**

**Qualifications**

Minimum of M.Sc. in Mining Engineering or related field. Previous teaching experience at the University level considered an asset. 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 being capable of working as a member of a teaching team.

**Course Description**

This course further develops physical concepts of mechanics and electromagnetism in the context of engineering applications. The first part of the course focuses on the mechanics of solid materials, building upon knowledge of rigid-body mechanics and introducing students to the concepts of material strength and elastic deformation. These concepts will be applied to structural members such as rods, columns, shafts, and beams, with loading conditions such as tension, compression, bending, and torsion. The second part of the course focuses on basic direct-current (DC) electrical circuitry and components including electric motors. Students will study concepts such as voltage, current, resistance, capacitance, and inductance. Simple circuit analysis using Kirchoff's laws will be presented, and the sizing and integration of electric motors both electrically and mechanically will be introduced.



### **Course Details**

Format: 3 lecture hours, no lab hours and no tutorials per week for twelve weeks. (Lec: 3, Lab: 0, Tut: 0)

Audience: undergraduate level students

Location: online

Lab Supervision - NA

Expected Enrolment (subject to change): 30 students

Percentage of Responsibility: 100%

The above course is online. Lectures and exams will be conducted online. The contract will run from September 1, 2024 to December 31, 2024. The fall session runs from September 3 to December 3, 2024 with exams running from December 7 to December 21, 2024.

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.

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 [mine.office@queensu.ca](mailto:mine.office@queensu.ca).

Teaching Fellow staff at Queen's University are governed by a collective agreement between [PSAC Local 901, Unit 1](#) and Queen's University.

### **Application Process**

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.

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.



**SMITH  
ENGINEERING**  
Queen's University

Robert M. Buchan  
Department of Mining

Applications can be submitted to the Adjunct Appointments Committee at the address below, or by e-mail to [mine.office@queensu.ca](mailto:mine.office@queensu.ca). Applications should arrive no later than **12noon on Wednesday, July 3, 2024.**

Adjunct Appointments Committee  
c/o Heather Drouillard  
The Robert M. Buchan Department of Mining Goodwin Hall, Rm. 354  
Queen's University  
Kingston, Ontario K7L 3N6