



**ROBERT M. BUCHAN DEPARTMENT OF MINING
Term Adjunct Position
Academic Year Winter 2025**

Posting Date: Monday, October 8, 2024

Closing Date: 12noon, Monday, November 4, 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.

**MINE 458 – Process Investigations
January 1 to April 30, 2025**

Qualifications

Minimum of BAsC in Mining Engineering or related field and must hold a professional engineering registration in Canada. 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

Projects may involve design of new processes, re-design of existing processes, process simulation and process innovation. Oral presentations and a formal report are required at the end of the term.

Course Learning Outcomes

1. Laboratory safety refresher - General outline of design project.
2. Characterization of the ore by sieve analysis and crushing in stages to minus 6 mesh.
3. Charge preparation to get representative samples.
4. Crushing/grinding- Bond work index lab and error analysis.
5. Mineral separation investigations/labs.
6. Mineral separation analysis/analytical work related to labs carried out-mass balances-performance analysis.
7. Lab investigations on water-solid separation.



8. Synthesis of flowsheet circuits-Size reduction.
9. Synthesis of flowsheet circuits-Mineral separation.
10. Dewatering stages and overall review of flowsheet.
11. Presentations of design projects by students in class.

Course Details

Format: 1 lecture hours, 3 lab hours, and 0 tutorial hours per week for twelve weeks. (Lec: 1, Lab: 3, Tut: 0)

Audience: undergraduate level students

Location: in person

Lab Supervision - Yes

Expected Enrolment (subject to change): 50 students

Percentage of Responsibility: 100%

The above course is in person at the Kingston, Ontario campus. The contract will run from January 1, 2025 to April 30, 2025. The winter session runs from January 6 to April 4, 2025 with exams running from April 6 to April 23, 2025.

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.

Academic staff at Queen's University are governed by a collective agreement between [QUFA](#), 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.



**SMITH
ENGINEERING**
Queen's University

Robert M. Buchan
Department of Mining

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 Adjunct Appointments Committee at the address below, or by e-mail to mine.office@queensu.ca. Applications should arrive no later than **12noon on Monday, November 4, 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