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 Fall 2023/24 session, in the Department of Mining.

**MINE 459 – Risk and Reliability Analysis for Industrial Asset Management, Health, and Safety Fall 2023**

**Qualifications:**
Candidates must have a minimum of a Master’s degree, Engineer in Training (EIT), and have a minimum of 5 years of industry and/or academic experience in engineering. Previous teaching experience relevant to design or project-based courses considered an asset. Candidates must have excellent communication and presentation skills and be capable of working as a member of a teaching team.

**Course Description:**
This course covers the analytical techniques and tools which form the foundations required for application of the ISO 55000 series of standards for effective life-cycle management of physical assets, as well as the ISO 45000:2018 standard for occupational health and safety management systems. The course uses risk analysis as the primary lens to investigate and evaluate a broad range of industrial challenges, ranging from equipment reliability and maintenance planning strategies, through to identification and mitigation of workplace health and safety hazards. Methodologies covered include Failure Mode, Effects, and Criticality Analysis (FMECA), Reliability Centred Maintenance (RCM), Hazards and Operability Analysis (HAZOP), and Internal Responsibility Systems (IRS) for Safety Management. The role of legislation and regulations is addressed. Selected topics in industrial hygiene, including exposure limits, are also surveyed. Examples and case studies from a variety of industry sectors are used.

**Expected Enrolment (subject to change):** 38 students.

The above course will be taught on campus. Fall term classes begin September 1, 2023, and end December 31, 2023. More information on the Undergraduate Academic Plan can be found [here](#).

**COVID 19 On-Campus Requirements**

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.

Academic staff at Queen’s University are governed by a collective agreement between QUFA, and Queen’s University. 

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 engineering.hr@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.

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 must be submitted by e-mail to mine.office@queensu.ca. Applications should arrive no later than August 13, 2023.

The Robert M. Buchan Department of Mining
Faculty of Engineering and Applied Science
Room 354, Goodwin Hall
Queen’s University, Kingston, Ontario K7L 3N6