

**DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING  
Faculty of Applied Science and Engineering  
University of Toronto**

**Job Posting for the 2018-2019 Session**

**This job is posted in accordance with the CUPE 3902 – Unit 3 Collective Agreement.**

**Job Description:**

Sessional Lecturer – MIE1622H: Computational  
Finance & Risk Management

**Department:**

Mechanical & Industrial Engineering

**Job Field**

CUPE 3902 Unit 3

Faculty of Applied Science & Engineering

**Campus**

St. George (downtown Toronto)

**Job Posting:**

May 1, 2018

**Job Closing:**

May 29, 2018

**Course number and title:** MIE1622H: Computational Finance & Risk Management

**Course description:** The course will cover a wide range of human factors topics related to transportation, in particular motor vehicle transportation. The students will gain an understanding of road user characteristics and limitations and how these affect design of traffic control devices and the roadway. The course topics include: history and scope of human factors in transportation; vision and information processing in the context of driving; driver adaptation; driver education, driver licensing and regulation; traffic control devices; crash types, causes, and countermeasures; alcohol, drug, and fatigue effects; forensic human factors.

The course will be taught in the form of lectures followed by relevant case studies involving practical application of knowledge gained. Case studies, and related assigned readings, will involve human factors in relation to crash pattern analysis and countermeasure selection, highway and traffic control design issues, driver regulation policy issues, and forensic investigation. The students will work on two projects, one in each half of the term, on topics of their choice. They will be asked to make presentations on these projects.

**Estimated course enrolment:** 30

**Estimated TA support:** TBD

**Class schedule:** one three-hour lecture per week; timetable to be determined

**Sessional dates of appointment:** January 2019 – April 2019

**Salary:** as of September 1, 2018 is \$8,160 (per half course inclusive of vacation pay). Please note that should rates stipulated in the collective agreement vary from rates stated in this posting, the rates stated in the collective agreement shall prevail.

**Minimum qualifications:** Applicants should have a strong record of presenting lectures or acting as a teaching assistant. Applicants must be able to demonstrate considerable depth of knowledge and experience in the subject area. The applicant must be able to lecture in a clear voice, and explain concepts clearly.

**Description of duties:** Duties include: preparation of lectures and course materials; delivery of lectures; possible supervision of Teaching Assistants; setting and marking of projects, tests and exams; evaluation of final grades; contact with students.

**Application instructions:** See course instructor job postings on the department website at <https://www.mie.utoronto.ca/about-mie/careers/>. If interested, please submit an updated CV and a completed Application Form (downloaded from <http://resources.hrandequity.utoronto.ca/cupe3902-resources/>) to the MIE Graduate Office (MC108) or by email to [cglee@mie.utoronto.ca](mailto:cglee@mie.utoronto.ca). If during the application and/or selection process you require accommodation due to a disability, please contact Prof. C-G Lee ([cglee@mie.utoronto.ca](mailto:cglee@mie.utoronto.ca)). The appointment will be made at the earliest possible time before the commencement of classes by the Associate Chair (Graduate) of the Department of Mechanical and Industrial Engineering. No other offers or notices of the outcome of applications are authorized by the Department. Final availability of the position is contingent upon final course determination, enrolment, budgetary considerations, and the final determination of assignments flowing from Article 14:03 of the Collective Agreement.

*It is understood that some announcements of vacancies are tentative, pending final course determinations and enrolment. Should rates stipulated in the collective agreement vary from rates stated in this posting, the rates stated in the collective agreement shall prevail.*

*Preference in hiring is given to qualified individuals advanced to the rank of Sessional Lecturer II or Sessional Lecturer III in accordance with Article 14:12 of the CUPE 3902 Unit 3 collective agreement.*

*Please note: Undergraduate or graduate students and postdoctoral fellows of the University of Toronto are covered by the CUPE 3902 Unit 1 collective agreement rather than the Unit 3 collective agreement, and should not apply for positions posted under the Unit 3 collective agreement.*