## 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 – MIE1120H: Current Energy

Infrastructure and Resources

**Department:** 

**Job Posting:** 

May 1, 2018

Mechanical & Industrial Engineering

Job Field

CUPE 3902 Unit 3

Faculty of Applied Science & Engineering

Campus

St. George (downtown Toronto)

Job Closing:

May 29, 2018

Course number and title: MIE1120H: Current Energy Infrastructure and Resources

Course description: This course covers the basic principles of where and how global energy is currently supplied, by primary source. The aim is to provide an energy literacy that can inform research, technology development and effective policy in this area. The course content will be divided strictly according to the current global energy mix (i.e. 34% oil, 29% coal, 23% gas, 7% hydro, 5% Nuclear, 2% Other). In each case background reading and critical analyses will be applied to: (a) the characteristics of the resource; (b) the infrastructure for extraction/development of the resource; (c) the usage of the resulting energy; and (d) the implications for usage. Assignments and exams will assess both background knowledge and the ability to apply fluid flow, thermodynamic and heat transfer analyses to energy supply systems.

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 iob postings on the department website 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. If during the application and/or selection process you require accommodation due to a disability, please contact Prof. C-G Lee (cglee@mie.utoroto.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.