Job Description: Sessional Lecturer – MIE1133H: Laser Applications In Engineering

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

Course number and title: MIE1133H: Laser Applications In Engineering

Course description: MIE1133 introduces the theory and practical applications of lasers in science, engineering and technology including laser basics & engineering and interaction mechanisms. The course focuses on laser applications in areas such as materials processing, laser machining, fluid mechanics, combustion, coating and surface analysis. Advanced optical diagnostics will be discussed including laser Doppler velocimetry, laser-induced fluorescence, and other similar techniques.

Estimated course enrolment: 25
Estimated TA support: TBD
Class schedule: one three-hour lecture per week; timetable to be determined

Sessional dates of appointment: September 2018 – December 2018

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: The department is seeking potential experienced candidates to teach a highly multidisciplinary course intended for graduate students. The department encourages all qualified applicants to apply but the priority will be given to candidates with extensive experience and has demonstrated application of this technology to science and engineering. The candidate must have:

- PhD in Applied physics with laser specialization or closely related fields
- 5-10 years of university lecturing experience at undergraduate and postgraduate levels
- Experience of application of optics / lasers in mechanical and material engineering
- Experience of application of nanotechnology in engineering
- The candidate 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.hrbrandequity.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.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.