

**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 – MIE1624H: Introduction to Data Science and Analytics

**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:** MIE1624H: Introduction to Data Science and Analytics

**Course description:** Finite difference and finite volume methods in fluid mechanics and heat transfer are presented. Spectral analysis is used to study the stability, accuracy and efficiency of different numerical schemes. A finite volume discretization of the conservation equations (mass, momentum, energy) is then considered. Different numerical schemes and algorithms are discussed for the solution of the Navier-Stokes equations. A working knowledge of a computer language is required.

**Estimated course enrolment:** 30

**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:** 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.*