

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

**Job Posting for the 2020-2021 Session**

This job is posted in accordance with the CUPE 3902 – Unit 1 Collective Agreement.

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**MIE550H1S: Advanced Momentum, Heat and Mass Transfer**

Course Description: This course observes: conservation of mass, momentum, energy and species; diffusive momentum, heat and mass transfer; dimensionless equations and numbers; laminar boundary layers; drag, heat transfer and mass transfer coefficients; transport analogies; simultaneous heat and mass transfer; as well as evaporative cooling, droplet evaporation and diffusion flames.

Schedule: TBD

TA Support: TBD

Course Enrolment (est.): 30

Campus: St. George

- **Date of appointment:** January to April 2021
- **Rate of pay:** as of January 1, 2020 is \$10,000 (per half course includes 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.
- **Duties include:** Preparation of lectures and course materials; delivery of lectures; supervision of Teaching Assistants; setting and marking of tests and exams; evaluation of final grades; contact with students.
- **Qualifications required:** 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. Please note that applicants should have excellent communication skills in English - both oral and written work. Professional Engineer (P.Eng.) license or Engineering Intern (EIT) registration required. Successful candidate will be reimbursed for the EIT registration fee.
- **Application Procedure:** See Course Instructor job postings on the department website at <https://www.mie.utoronto.ca/about-mie/careers/> If interested, submit a Course Instructor Application Form, Resume and Teaching Dossier to the MIE Undergraduate Office (MC109) or by email to [ugservices@mie.utoronto.ca](mailto:ugservices@mie.utoronto.ca). If during the application and/or selection process you require accommodation due to a disability, please contact Gayle Lesmond/ [ugservices@mie.utoronto.ca](mailto:ugservices@mie.utoronto.ca) Applicants are required to fill out an application form, which can be found on the department website (<https://www.mie.utoronto.ca/about-mie/careers/>) and returned to: Mechanical Engineering Building, Room 109 or by emailing [ugservices@mie.utoronto.ca](mailto:ugservices@mie.utoronto.ca) by **June 12, 2020**. Applicants must include full contact information of their supervisor, plus two U of T employees (faculty or staff) who can testify to the teaching skills of the applicant. The appointment will be made at the earliest possible time before the commencement of classes by the Associate Chair (Undergraduate) 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.