

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 1 Collective Agreement.

This posting is for a Course Lecturer for one section of **MIE243H1: Mechanical Engineering Design** to be taught in the Fall Term of 2018.

MIE243H1: Mechanical Engineering Design

Introduction to basic mechanical parts and mechanisms: gears, cams, bearings, linkages, actuators and motors, chain and belt drives, brakes and clutches, hydraulics and pneumatics. Tutorials on engineering drawing, sketching, and CAD/CAM in SolidWorks: views and drawing types, 2D sketching, 3D modeling and engineering drawing generation, modeling of assembly and motion analysis/animation. Conceptual design examples and mechanical engineering design process, including selection and applications of mechanisms. Dissection and reverse engineering of selected mechanical devices, mechanisms, and subsystems. Competitive group design project including technical report and 3D printing. Instruction and assessment of communication centered around course deliverables that will form part of an ongoing design portfolio.

Schedule: TBD

TA Support: TBD

Course Enrolment (est.): 183

Campus: St. George

- **Date of appointment:** September to December 2018
- **Rate of pay:** as of January 1, 2018 is \$7,596.15 (per half course excludes 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 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. If during the application and/or selection process you require accommodation due to a disability, please contact Carla Baptista/ ugservices@mie.utoronto.ca. Applicants are required to fill out an application form, which can be picked up from and returned to: Mechanical Engineering Building, Room 109 or by emailing ugservices@mie.utoronto.ca by **May 9th, 2018**. 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