

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

Job Posting – Course Instructor Position
Fall/Winter Term 2022/2023

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

The Department of Mechanical & Industrial Engineering seeks One Course Instructor for the following course:

MIE366H1 – Electronics for Robotics

The course provides an introduction to circuit analysis and design for mechatronics applications. The focus is on building a working knowledge of: (1) op-amp circuits, (2) step response, steady-state response, and frequency response, (3) passive and active filter design, and (4) applications of the above to mechatronics systems, including sensors and instrumentation. The course will continue with a study of the fundamental behaviour and specific applications of the major semiconductor devices, including (5) diodes and (6) field effect transistors. Additional 'design assignments' will require students to design real-world viable circuits for mechatronics applications, and laboratory experiments will present additional applications for all circuits being studied.

Schedule: TBD

Lecture: TBD

Tutorial: TBD

Estimate of TA Support: TBD

Estimated Course Enrolment: 60 students

Campus: St. George

- **Date of appointment:** September to December 2022
- **Rate of pay:** \$8,061.89 (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. All applicants should have excellent communication skills - both oral and written. Professional Engineer (P.Eng.) license or Engineering Intern (EIT) registration required. Successful candidate will be reimbursed for the EIT registration fee. **The plan is for this course to be offered in person. However, some or all in-person teaching may change to online teaching depending on health and safety measures in Summer 2022.**
- **Relevant Criterion:** Past teaching experience is the more relevant criterion than the need to acquire experience in respect of this posted position.
- **Application Procedure:** Please submit a Course Instructor Application Form, Resume and Teaching Dossier to the MIE Chair's Office by email at jj.brown@utoronto.ca no later than **September 15 at 11:59PM (eastern time)**. The Course Instructor Application Form can be found on the MIE Careers page here: <https://www.mie.utoronto.ca/faculty-staff/careers/>. 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.

The University strives to be an equitable and inclusive community, and proactively seeks to increase diversity among its community members. Our values regarding equity and diversity are linked with our unwavering commitment to excellence in the pursuit of our academic mission. The University is committed to the principles of the Accessibility for Ontarians with Disabilities Act (AODA). As such, we strive to make our recruitment, assessment and selection processes as accessible as possible and provide accommodations as required for applicants with disabilities. If you require any accommodations at any point during the application and hiring process, please contact uoft.careers@utoronto.ca. During employment, to request accommodation from the University, contact the supervisor or department chair and/or Health & Wellbeing Programs & Services at hwb@utoronto.ca. For more information about accommodations at U of T, please visit our Accommodation webpage.

The hiring criteria for Course Instructors positions are academic qualifications, the need to acquire experience, previous teaching experience and previous satisfactory employment under the provisions of this Collective Agreement.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ2S+ persons, and others who may contribute to the further diversification of ideas.

Candidates who are members of Indigenous, Black, racialized and LGBTQ2S+ communities, persons with disabilities, and other equity seeking groups are encouraged to apply, and their lived experience shall be taken into consideration as applicable to the position.

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

The position(s) posted above is (are) tentative, pending final course determinations and enrolments.

Positions posted here are open to Graduate Students in the School of Graduate Studies, Postdoctoral Fellows and Undergraduate Students in the University of Toronto.