



UNIVERSITY OF TORONTO  
FACULTY OF APPLIED SCIENCE & ENGINEERING

**MAT188H1S– Linear Algebra**  
**Numeric Computation (MATLAB) Laboratory Teaching Assistants**  
**Winter 2024**  
**CUPE 3902 Unit 1**

The Faculty of Applied Science and Engineering is hiring will be hiring **At least (2) Laboratory** Teaching Assistants within the First Year Program to support the Numeric Computation Component of MAT188H1S: Linear Algebra for the term beginning January 2024. These positions will be responsible for supporting the delivery of the MATLAB-based computer laboratory component for Linear Algebra.

**MAT188H1S – Linear Algebra Course Description** This course covers systems of linear equations and Gaussian elimination, applications; vectors in  $R^n$ , independent sets and spanning sets; linear transformations, matrices, inverses; subspaces in  $R^n$ , basis and dimension; determinants; eigenvalues and diagonalization; systems of differential equations; dot products and orthogonal sets in  $R^n$ ; projections and the Gram-Schmidt process; diagonalizing symmetric matrices; least squares approximation. Includes an introduction to numeric computation in a weekly laboratory. Estimated Enrollment: 50

**Duties:** These teaching assistants will work directly with the course coordinator, and the laboratory coordinator in order to: (a) Support students to complete their bi-weekly one-hour numeric computation laboratory exercises, (b) Help students develop a basic ability to use MATLAB to solve mathematical, scientific, and engineering problems, (c) See how numeric computation can be used in their other first-year courses and (d) Assess students' degree of participation in the laboratory.

**Skills and Qualifications:** Previous experience is the more relevant criterion than the need to acquire experience in respect of this posted position. Strong background in linear algebra is required. Experience with MATLAB or similar computational software is required. Prior experience with working as a TA within the first year program, in Linux computer labs, and engineering mathematics courses is an asset.

**At least Two (2)** Teaching Assistant positions are available for **MAT188, from January 2, 2024 to April 30<sup>th</sup> 2024**. The contract will be for **63 hours, 60 hours for course duties plus 3 hours final exam invigilation at the rate of \$47.64 per hour, plus 4% vacation pay.**

**How to Apply:** Candidates are asked to submit, **as ONE PDF document:**

1. 1-page Cover letter;
2. Curriculum Vitae;
3. A summary that demonstrates your experience, interest and/or excellence in teaching (maximum 1 page).

The course and duties will be offered in-person (or a hybrid of online/in-person), the final decision about the delivery will be made/communicated by the University at a later date.

The Faculty of Applied Science & Engineering and First Year Office thanks all applicants for their interest; however, only those candidates considered for the position will be contacted.

**The application deadline is: October 24, 2023, 4:00 PM, EDT**

**Posting Date: October 02 , 2023.**

**Submit application online via: <https://forms.office.com/r/UTfE2bmcgf>**

If during the application and/or selection process you require accommodation due to a disability, please Contact : [fjobs@engineering.utoronto.ca](mailto:fjobs@engineering.utoronto.ca)

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](mailto: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](mailto:hwb@utoronto.ca). For more information about accommodations at U of T, please visit our [Accommodation webpage](#).

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

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.

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.

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.

Preference in hiring shall be given to Graduate Students enrolled in the School of Graduate Studies of the University of Toronto or those who have made application to be enrolled in the School of Graduate Studies of the University of Toronto.