

# First Year Program, Faculty of Applied Science & Engineering MAT188H1F– Linear Algebra Numeric Computation (MATLAB) Laboratory Teaching Assistants Fall 2022

The First Year Program in the Faculty of Applied Science & Engineering will be hiring **at least Fifteen (15)** Laboratory Teaching Assistants to support the Numeric Computation Component of MAT188H1F: Linear Algebra in the Fall 2022 term (September 1 2022 – December 31, 2022). These positions will be responsible for supporting the delivery of the MATLAB-based computer laboratory component for Linear Algebra.

MAT188H1F – Linear Algebra: This course covers systems of linear equations and Gaussian elimination, applications; vectors in Rn, independent sets and spanning sets; linear transformations, matrices, inverses; subspaces in Rn, basis and dimension; determinants; eigenvalues and diagonalization; systems of differential equations; dot products and orthogonal sets in Rn; projections and the Gram-Schmidt process; diagonalizing symmetric matrices; least squares approximation. Includes an introduction to numeric computation in a weekly laboratory. Estimated Enrollment: 950

The contracts will be for at least **75 hours, at the rate of \$47.17 per hour, plus 4% vacation pay**. **Qualifications:** Strong background in using MATLAB in an engineering context is required. Previous experience is the more relevant criterion than the need to acquire experience in respect of this posted position. Prior experience with working as a TA within the first year program and engineering mathematics courses is an asset.

**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.

## How to Apply:

Candidates are asked to submit, as ONE PDF document, the following:

- 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 may be offered online, in-person or a hybrid of both, the 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.

### Submit application online via:

## https://forms.office.com/r/PUQf6rrakX

### The application deadline is May 09, 4:00 PM, 2022, EDT.

Posting Date: March 25, 2022.

If during the application and/or selection process you require accommodation due to a disability, please Contact : <u>fyjobs@engineering.utoronto.ca</u>

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 <a href="https://www.nwe.nwe.uoronto.ca">https://www.nwe.nwe.uoronto.ca</a>. For more information about accommodations at U of T, please visit our <a href="https://www.nwe.uoronto.ca">https://www.nwe.uoronto.ca</a>. For more information about accommodations at U of T, please visit our <a href="https://www.accommodation.webpage">https://www.accommodation.webpage</a>.

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.