

Posting: March 8, 2021

University of Toronto
Faculty of Applied Science and Engineering
Mechanical and Industrial Engineering Department

Area: Engineering education and qualitative studies on women in engineering

Description. The Faculty of Applied Science and Engineering at the University of Toronto has made great strides in increasing women undergraduate enrolment, with more than 40% of first-year engineering students identifying as women. However, women graduate studies enrolment in FASE has been largely stagnant for the past 20 years at 25±2% with representation of women as low as 12.8% in some disciplines. The existence of this enrollment gender gap is troubling because it hinders our tapping into this talent pool. Systemic issues such as implicit bias and stereotype threat are contributing to this gap, but our understanding of the obstacles hindering the transition of our women undergraduate students into graduate studies is incomplete. We are seeking candidates for the *Postdoctoral Fellowship position* to investigate the decision factors and barriers that our women engineering students consider when considering graduate studies as a possible career path. Our goal is to use knowledge of these factors and barriers to build pathways for women into engineering graduate studies. The hired candidate will work with Prof. Aimy Bazylak and Prof. Jason Bazylak (in partnership with FASE, ILead, MIE, ChemE, ECE, CivMin, UTIAS, and GradSWE) in coordinating a longitudinal study of our first large waves of women undergraduates to track their career paths and correlate these pathways to their decision factors and barriers to graduate studies. The candidate will prepare, execute, and analyze surveys, interviews, and focus groups to determine obstacles and design interventions that enable these new cohorts of undergraduate women to pursue graduate studies.

Required qualifications: PhD in Engineering or Sciences with the following additional experience:

- Training in and/or experience with the engineering profession
- Demonstrated passion for reducing the under-representation of women in the engineering profession
- Training in and/or experience with qualitative research methodologies
 - Qualitative data collection methods such as surveys, interviews and focus groups
 - Qualitative data analysis methods such as language coding
- Experience with academic research and writing
- Strongly independent self motivating worker
- Excellent communication skills (oral and writing).

Salary range: starting at \$35,704

Expected start date: April 10, 2021 or as soon as possible

Term: One-year term with a possible renewal

FTE: 100%

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (pro-rated for those holding a partial appointment) recognizing that the needs of the employees' research and training and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work.

Application instructions. Applications must be submitted via email to Professor Aimy Bazylak at abazylak@mie.utoronto.ca including a cover letter, CV, sample research papers, and contact information of at least three references.

Closing date: April 5, 2021

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement.

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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, LGBTQ persons, and others who may contribute to the further diversification of ideas.