

Title: Global Engineering Challenge Instructor

Dates of Employment: May 2022 – August 2022

Department: Engineering Outreach Office, Faculty of Applied Science and Engineering

Rate of Pay: \$18.80 per hour

Hours/Week: approx. 40 hours/week

**Number of Positions: 4** 

The Engineering Outreach Office (EOO), created in Fall 2009, manages and administers the core outreach programs offered by the Faculty. We act as the central unit for outreach activities promoting Science, Technology, Engineering and Math (STEM) education to a wide audience. We design and deliver programs centrally, and coordinate the activities by other entities including student organizations, Faculty members, and Departments. The vast majority of outreach activities supported by EOO are pre-university programming.

This position is eligible for recognition through the Co-Curriculum Record (CCR) for University of Toronto students.

#### **Duties and responsibilities:**

Reporting to the Outreach Coordinator, DEEP and High School Programs, and under the direction of the Associate Director, Engineering Outreach Office, the Global Engineering Challenge Instructors will deliver online workshops to high school students. This program encourages students to use the engineering design cycle to explore creative and sustainable solutions to real world problems.

The Global Engineering Challenge aims to broaden the minds of Grade 9–12 students. This program mimics a capstone style course and is designed for highly committed and motivated students who have an interest in problem-solving. Topics for Spring/Summer 2022 are "Youth Mental Health" and "Ocean Clean-Up Project". Instructors will develop new topics to be piloted in August 2022.

# Specific duties may include:

- 1. Maintaining a safe virtual environment (arriving to online sessions early, monitoring chat and breakout groups, upholding the Student Code of Conduct, etc.)
- 2. Build on existing activities and courses to prepare a detailed course outline, submit activities for safety approval, and materials lists for purchasing.
- 3. Recruiting guest speakers, as directed
- 4. Develop the Quercus site, as directed
- 5. Participating in the evaluation component of the program
- 6. Attending regular meetings with other GEC Instructors, Team Leaders, and Program Coordinator
- 7. Build proficiency with tools required for virtual learning, including Audio-Visual, and Learning Management System (LMS)
- 8. Regular communication with students using specified platforms
- 9. Responding to participant situations that may arise in accordance with program/site procedures
- Act as an ambassador of the Faculty of Applied Science & Engineering and the University of Toronto

# **Qualifications:**

Previous experience with EOO High School Programs is an asset.

- Preference will be given to students in undergraduate engineering programs. Applications from students in the sciences, education and other related disciplines, are also encouraged to apply.
- Applicants must have experience working with children and youth, preferably in a camp environment.

# We are looking for individuals who:

- Are familiar with software using in the design process (HTML/CSS, SketchUp, Figma, Fusion 360, etc.)
- Have a high degree of scientific or engineering literacy
- Excellent oral and written communication skills
- Able to work flexible hours including some evenings and weekends
- Have collaborative and teamwork skills; Strong oral and written communication skills
- Are familiar with equity and social justice approaches to education
- Able to work with people from other cultures / backgrounds
- Comfortable utilizing various online applications and services (Quercus, Google Suite, Microsoft Teams, etc.)
- Well-developed problem solving and conflict resolution skills

A Police Clearance Letter will be required of all successful applicants.

# How to apply:

Qualified applicants should complete the <u>application form</u>, including their résumé, by **April 10, 2022**. Link to application form: https://forms.gle/NZMPdYuC6fjR4Xc29

Questions or requests for accommodation may be sent to the attention of Claire Heymans, Outreach Coordinator, Engineering Outreach Office at <a href="mailto:apply@engineeringoutreach.ca">apply@engineeringoutreach.ca</a>. Please include the position you are applying for in the subject line.

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.