

DEEP Content Specialist – Summer 2020

DEEP provides well-rounded and highly motivated high school students with an aptitude for math and science, from across the world with the opportunity for advanced study in a variety of engineering, technology, business and science disciplines. Organized by the University of Toronto's Faculty of Applied Science and Engineering, DEEP offers one of the most diverse ranges of pre-university engineering and science courses in North America. Since its inception in 2003, DEEP has brought together over 10,000 like-minded students to explore some of the most innovative topics in engineering and science today—taught by some of our faculty's top Alumni, Ph.D. and Masters students. This program has been designed to expose bright young minds to concepts usually presented in the upper years of an undergraduate degree or in graduate school.

More information about the DEEP can be found at: <http://uoft.me/deep>

The DEEP Content Specialists (10) will play an important role for the High School Outreach Programs of the Engineering Outreach Office, specifically DEEP Spring Seminar Series and DEEP Summer Academy. The role is divided into two parts:

- During **February-April**, each specialist will focus on the development of a DEEP course.
- During **May-August**, each specialist will be matched with a group of DEEP Instructors. The specialists will provide support to DEEP Instructors during activities.

The specialist role will be highly fluid; DEEP seeks candidates that will thrive in dynamic working environments.

Duties

All specialists must attend training. One training day is tentatively scheduled for April 13, 2020. Full details will be shared with successful candidates.

Specialists will become familiar with the high school curriculum, effective teaching strategies for high school students, and activity procedures specific to the Engineering Outreach Office.

Each specialist will adapt existing course materials to create a high-quality DEEP course in an assigned topic area. This will include course outlines, activity safety forms, guest speakers, field trips, etc.

Specialists are responsible for reviewing course outlines and other course documents prior to the start of program. They will assist with materials preparation and facilities management, as related to their assigned courses.

Specialists are required to meet with stream-specific instructors at least once to go over their course(s). A separate meeting will be held to introduce the counsellors to the course.

Specialists will be present in class at all times and will support the entire course. Should an instructor be unexpectedly absent, the specialist will be expected to facilitate the course.

Specialists are the primary first aid responder in the classroom. They are expected to know the whereabouts of the first aid equipment at all times. Documentation related to incidents will be promptly completed by specialists.

Qualifications

- Current undergraduate student (or recent graduate)
(preference will be given to students in the Faculty of Applied Science & Engineering)
- Experience working with youth aged 13-18 is an asset
- Experience in one (or more) of the following areas:
 - Aerospace Laboratories (AER 303, or equivalent)
 - Artificial Intelligence Fundamentals (APS 360, or equivalent)
 - Biomedical Engineering Technology (BME 346, BME 440, or equivalent)
 - Biomechanics and Rehabilitation (BME 430, or equivalent)
 - Chemical Engineering Laboratories (CHE 204, or equivalent; CHE 304 preferred)
 - Civil Engineering Graphics (CIV 235, or equivalent)
 - Hydrology and Hydraulics (CIV 250, or equivalent)
 - Electric Energy (ECE 314, or equivalent)
 - Digital and Analog Electronics (ECE 331, ECE 334, or equivalent)
 - Communication Systems (ECE 316, or equivalent)
 - Computer Hardware (ECE 342, or equivalent)
 - Engineering Psychology and Human Performance (MIE 242, or equivalent)
 - Industrial Ergonomics (MIE 343, or equivalent)
 - Manufacturing Engineering (MIE 221, or equivalent)
 - Kinematics and Dynamics of Machines (MIE 301, or equivalent)
 - Thermal Energy Conversion (MIE 311, or equivalent)
 - Structure and Characteristics of Materials (MSE 219, or equivalent)
 - Materials Manufacturing and Design (MSE 398, or equivalent)
 - Forensic Engineering (MSE 431, or equivalent)

Details

Hiring Department: Engineering Outreach Office
Campus: St. George
Rate of Pay: \$16.30 per hour
Schedule: February to mid-June: part-time
mid-June to mid-August: full-time
opportunity to continue on a part-time basis in 2020-21

How to apply

Qualified applicants should submit their cover letter with resume to the attention of Claire Heymans, Outreach Coordinator, Engineering Outreach Office. Submissions can be emailed to apply@engineeringoutreach.ca (please include the position you are applying for in the subject line).

Applications are due no later than 9:00am on Monday, December 9, 2019.