

BLUEPRINT Course Instructor

Hiring Department: Engineering Outreach Office, Faculty of Applied Science & Engineering

Course: Engineering and Human Health

Campus: St George Campus

Rate of Pay: \$35.00/hour (35 hours a week)

Date of Employment: June 2025 - August 2025

TA Support (est.): Mentors act as TAs for the course

Class Schedule: Varies Monday – Thursday 9:00am-12:00pm, 12:30pm-3:30pm

Closing Date: April 10th, 2025

About the Program:

Blueprint is an academic enrichment program that was designed for highly motivated Black students in Grades 10 and 11 who are interested in careers in Science, Technology Engineering and Math with a strong interest in Engineering.

Position Description:

To provide high school students with a unique and challenging learning experience during the program, it is preferred that all Blueprint instructors are currently in pursuit of either a Masters or PhD degree at the University of Toronto and have previous teaching experience. Instructors generally come from the Faculty of Applied Science & Engineering at the University of Toronto; however, previous instructors have also come from other professional faculties including the Faculty of Pharmacy and the Faculty of Medicine, and other universities. Instructors of this calibre serve as an inspiration for high school students while providing them with a taste of the university experience. The Engineering Outreach Office also welcomes applications from recent alumni. This course will only run for four weeks.

□ **Mandatory Training:** All instructors are required to attend two training sessions. The first session (7 hours) is tentatively scheduled for May, while the second session (7 hours) will take place in early to mid-June. Full details will be provided to successful candidates.

□ **Curriculum Development:** Instructors are responsible for developing the course curriculum and submitting it for approval. The course content must align with the description outlined on the Engineering Outreach Office website and any associated publications.

□ **Activity Approval:** All instructor-created activities must be reviewed and approved by the Outreach Coordinator and the department's Safety Officer. Instructors must complete and submit the necessary forms, including a detailed list of materials and equipment, by the specified deadline (TBD).

□ **Class Facilitation:** Instructors are expected to be present and actively facilitate the entire course. This includes:

- Arriving at 9:00 a.m. on the first day and 8:30 a.m. on all lecture days.

- Remaining until 3:30 p.m. on Lab days and participating in a debrief at the end of each week.
- Delivering lectures twice a week and conducting lab sessions four times a week.
- Manage Quercus Classroom as a supplement to in-person lessons.

□ **Instruction and Facilitation:** Instructors are responsible for delivering lessons, facilitating class discussions and debates, demonstrating and conducting laboratory and design activities, and providing hands-on assistance to participants. They will also lead any relevant course field trips. Additionally, instructors are responsible for setting up laboratory and audiovisual equipment as required for their course.

□ **Collaboration and Communication:** Instructors must meet with course mentors by the date specified by the Outreach Coordinator and maintain regular communication with the staff until the course is delivered.

□ **Logistics and Preparation:** Instructors are required to meet with the Blueprint Team Leader and Materials Team for at least two hours in May or June to review course logistics, materials, and facility requirements.

Qualifications:

M.Sc. or PhD in Engineering candidate preferred, ideally Biomedical Engineering or Mechanical Engineering.

- Applicants should have a strong record of teaching, particularly using engaging teaching methods.
- Applicants must be able to demonstrate considerable depth of knowledge and experience in the subject area.
- The applicant must be able to speak to a group (50 students) in a clear voice and explain concepts clearly.
- Demonstrated leadership skills; adept at working independently and in a team environment.
- High level time management and organization skills
- Familiarity with equity and social justice approaches to education.
- Aptitude for problem solving and ability to think critically and creatively.
- Extensive knowledge of University of Toronto programs and services
- Proficiency with relevant computer applications (MS Office, Google Suite, Zoom etc.)

Other:

- If an offer of employment is extended, it will be conditional upon the submission of a police records check clearance letter AND proof of completion of mandatory online U of T training (AODA, WHMIS, Basic Health and Safety Awareness Training).
- There are no marking or evaluation assignments/duties for Blueprint; however, the instructor may choose to produce problem sets, non-marked mini-assignments, or reading for the class depending upon the nature of the particular course.
- Instructors are required to be part of the opening (9:00am-9:30am on the first day) ceremonies as directed by the Program Coordinator.

- Instructors are required comply with any safety procedures outlined in training.
- Instructors must be able to work flexible hours including some evenings and weekends.
- Instructors will contribute to maintaining a safe environment.
- Instructors are expected to communicate all concerns and incidents to the Program Coordinator immediately. Documentation related to any incidents will be promptly completed by instructors.
- Instructors are required to complete all course feedback forms in a timely fashion and submit them to the Program Coordinator at the completion of each course.
- Instructors are encouraged to offer support and guidance and demonstrate leadership to all program participants being mindful that they are representing the Faculty of Applied Science & Engineering and the University of Toronto.

How to Apply:**Applicants submit:**

1. Cover-letter
2. Résumé/CV

Qualified applicants should submit their cover letter and résumé/CV to the attention of Cassandra Abraham, Coordinator, Engineering Outreach Office at Cassandra.abraham@utoronto.ca

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. The University of Toronto invites all qualified applicants to make application. 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. 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 Cassandra.abraham@utoronto.ca.