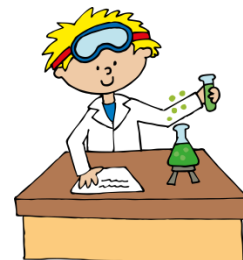


# Science Enrichment Opportunities for High School Students



## University of Toronto Space Design Contest (UTSDC)

Description: An engineering contest for students interested in space. Every year a challenge is given for example: designing a strategy to deflect an asteroid or designing a life support system for a space colony. Students have to develop a proposal for their design. Groups of 1-5 people are accepted. Grades: Junior category: 9-10, Senior category: 11-12 Registration: November – mid-Jan. online Dates: Proposal due late April and design conference in late May Website: <http://www.utspace.org/>

## Sanofi Aventis BioTalent Challenge

Description: A biology challenge where students develop a research project based in health care, agriculture or biotechnology and then perform experiments to test their hypothesis with the help of mentor. Grades: 11 and 12 (grade 9 and 10 can but very difficult) Registration: Application and proposed project due November. Dates: Research from December to March with presentation in April Website: <http://biogenius.ca/competition-information/>

## Ontario Science Centre Science School (OSCSS)

Description: An amazing experience where 30 Grade 12 students have the opportunity to go to school at the science centre for one semester. Students take classes, participate in special events, help with school programs and work on the floor with hosts. Grades: 12 Registration: Application due beginning of April of the Grade 11 year Dates: First or second semester. Website: <https://www.ontariosciencecentre.ca/oscschool/>

## Waterloo Unlimited

Description: A weeklong enrichment program at the university of Waterloo where students attend lectures, participate in design challenges and activities around the campus. Each grade has a different theme one of vision, design or research. Grades: 10- 12 Registration: Varies Dates: Gr.10 May (5 days), Gr. 11 March (5 days), Gr. 12 November (3 days) Website: <http://www.uwaterloo.ca/unlimited>

## York U – Helix Summer Science Institute

Description: Week-long enrichment programs for students Grades 9-12. A choice of nine different themes each with 4 different week-long sessions. Experience university-level lectures, hands-on workshops, experiments, demonstrations and field trip research. There is an optional residence program. Application deadline: Usually May 1<sup>st</sup> Dates: July Website: <http://helix.science.yorku.ca/>

## York University Biophysics Challenge

Description: A biophysics contest aimed at students in Grades 9/10 (junior) and 11/12 (senior). Students prepare a narrated PowerPoint or KeyNote presentation on a topic selected from a given list 9 (e.g. How does a butterfly wing get its colours?) First prize: \$1250 (\$1000 to the student(s) and \$250 for the school's Science Department). Groups may consist of up to 3 students. Deadline for submission: May. Website: <http://www.biophysics.info.yorku.ca/contest>

## Canadian National Brain Bee

Description: A knowledge based neuroscience competition for those interested in pursuing medicine. The top competitors from the Toronto region move on to compete at the national level. Cash prize of \$1500 for the first place winner Grades: 9-12 Registration: Usually February – March (or earlier) – best to register early so that you can begin to learn the material. Dates: Competition is at the end of March Website: <http://www.science.mcmaster.ca/brainbee/>

## Queen's EMC (Residence) Enrichment Program

**Description:** A program at Queens which provides students the opportunity to stay in residence and participate in a week-long course in everything from drama to astronomy to biotechnology. Information for the 2016 program available in November. **Grades:** 10-12 **Registration:** February – April (register early to ensure you get the programs that you want) **Dates:** one week in May **Website:** <http://esu.queensu.ca/programs/high-school-programs/>

## U of T – DEEP – Saturday Science and Engineering Programs

**Description:** A program offering a series of lectures and activities on various streams of the engineering field such as biomedical, theoretical physics and computer science **Grades:** 9-12 **Dates:** Check website to see if this is being offered in the 2015-2016 academic year **Website:** <http://outreach.engineering.utoronto.ca/pre-university-programs/engineering-high-school-saturday-program/>

## U of T - DEEP Summer Academy and Leadership Camp

**Description:** A summer program with science, engineering, math and business streams that allows highly motivated students to experience university and learn new and exciting material in the field they are interested. **Grades:** 9-12 **Registration:** Application and letter of reference. In 2016, DEEP Summer Academy will run from July 4 – 29 at U of T's St. George Campus, located in downtown Toronto. Plans for DEEP 2016 are currently underway. **Registration will open in the new year.**

**Website:** <http://outreach.engineering.utoronto.ca/pre-university-programs/deep-summer-academy/deep-leadership-camp-2/>

**Website:** <http://outreach.engineering.utoronto.ca/pre-university-programs/deep-summer-academy/>

**Other Enrichment Opportunities at the University of Toronto** The opportunities include: Faculty of Medicine's and Faculty of Law's Youth Summer Program, High School Gifted Program Conference, and Academic Contests

<http://www.artsci.utoronto.ca/futurestudents/academics/hsprograms>

## Shad Valley

“SHAD provides the unique opportunity to explore a university campus while still in high school, and experience higher learning in a supportive yet challenging environment. Included are lectures, seminars and workshops, presentations by industry leaders, working in teams to simulate a ‘startup’ project, and recreational activities.” **Dates:** July 3<sup>rd</sup>-29<sup>th</sup>, 2016 <http://www.shad.ca/About.htm>

**Canadian Wide Science Fair** **Website:** <http://cwsf.youthscience.ca/>

## 2015 Gene Researcher for a Week Program

The Canadian Gene Cure Foundation is selects motivated and ambitious students in grades 11 and 12 who have an innate curiosity for science, human genetics, and human genetics research. This year we anticipate being able to place 50 plus students in this program. <http://genecure.ca/en/programs/gene-researcher-for-a-week/program-description/>