

The geekStarter program provides support for education initiatives and projects involving teams of K-12, undergraduate, and graduate students in Alberta. A number of resources are available for acquisition and development of research skills in cutting-edge Science, Technology, Engineering and Mathematics (STEM) fields, and for building students' competencies for the new millennium. Support from the geekStarter program includes learning resources, financial assistance, mentorship, workshops/events, and access to subject matter experts. The student-driven, hands-on projects and challenges supported by geekStarter offer immersive and cross-disciplinary learning experiences that have an enduring impact on all the participants.

The purpose of the geekStarter program is to prepare students in emerging STEM fields and exponential technologies, such as synthetic biology, nanotechnology, new information and computing technologies, and artificial intelligence. At the same time, the geekStarter program aims to foster an entrepreneurial mindset in the young generation. In 2016, the program was transferred from Alberta Innovates to MindFuel, where it is part of the Edacity program.

Since its inception in 1990, MindFuel has inspired K-12 students to pursue higher education and careers in STEM fields through hands-on, digital and experiential learning opportunities. As one of MindFuel's programs, Edacity focuses on engaging students in innovation and entrepreneurialism in STEM.

The following guidelines have been provided for all funding recipients and program participants.

When accepting geekStarter funding and mechanisms of support, participants acknowledge that they have read and understood all of the program's guidelines and accept the conditions and subsequent responsibilities contained in this document.

Eligibility Requirements

1. The initiative's school / organization must be **located in Alberta**.
2. A **principal advisor** possessing sufficient resources to ensure a satisfactory result and responsible financial accounting must sponsor the initiative. geekStarter must be able to transfer award funds to a **legal entity** such as a non-profit organization, school or university, where the principal advisor can provide responsible oversight of the initiative and of geekStarter-supplied funds.
3. The initiative must be **student-driven** and carried out by a **team of students** with the assistance of the principal advisor and mentors.
4. The initiative must involve **hands-on research activities in emerging STEM fields**, and must provide opportunities for **original project work and solving real-world problems identified by the applicants**. The initiative should emphasize the **development of critical 21st century skills and entrepreneurial competencies** in students.
5. For teams competing in an established local, regional or international competition, proof of **successful registration in that competition** must be provided.

6. As geekStarter funding is a launching pad to kick-start projects, teams working on the same project or challenge will be funded for a **maximum of three funding cycles**.

Application Process

Interested parties may apply for geekStarter support by completing the application form available on the program website (www.edacity.ca/geekStarter).

Applications are typically accepted twice a year, in the spring (April-May) and in the fall (September - October). Deadlines are posted on the program website, and interested teams can direct inquiries to geekStarter@mindfuel.ca or to the geekStarter program manager.

Review Procedure and Selection Criteria

geekStarter invites a group of external reviewers to assist in evaluating the applications and in deciding how well they meet the program's eligibility requirements. The review process involves the rubric included with these guidelines on the program website. Final decisions on which applications to approve and how much funding to offer are based on the reviewers' evaluations, the total number of applicants, and the overall amount of funds and resources available. Both successful and unsuccessful applicants are typically notified of the result via email 1-1.5 months after the application deadline.

Period of Support and Award Termination

Start and end dates are indicated in the Agreement letter between MindFuel and the host organization. When geekStarter recipients complete their award term or resign from the geekStarter program, or the initiative is terminated by the host organization during the period of support, funding will also terminate. The principal advisor and host organization must notify MindFuel immediately, return any unused funds and provide a final report.

Confidentiality

By accepting a geekStarter award, recipients are required to keep the value, terms, and conditions of the award confidential, unless permission is given in writing by MindFuel.

Changes to Approved Applications

Recipients of geekStarter awards must **inform MindFuel of any significant changes** to the original application throughout the award term. This includes, but is not limited to, changes in principal advisor, team roster, or any significant changes of the proposal itself.

Reporting and Communication

Initiatives that are approved for geekStarter funding will be required to provide additional information before, during and at the conclusion of their award term, including team lists, media waivers, project updates, individual student reporting, and responses to participant surveys.

A final report is required from each team at the end of their geekStarter period of support. The due date of the report is indicated in the Agreement letter between MindFuel and the host institution. Please note: The final report includes specific outcomes and description of activities, financial reporting and sign off by an authorized financial authority. **Incomplete final reports may impact future funding decisions.**

Important deadlines and other information relevant to program participants will be communicated through the geekStarter newsletter and the program website.

Unused Funds

Any funds remaining in the award's related account(s) as of the period of support end date must be returned to MindFuel. These funds are considered unused if the account has a credit balance after the end date.

Privacy

MindFuel reserves the right to publish and/or disseminate information regarding its supported initiatives (projects, events, competitions, etc.) including titles and non-proprietary details of the research, images, and names and photos of participants. All geekStarter team members, students and student advisors **must sign a media waiver** in order to participate in the program (parental or guardian consent must be given for students under the age of consent). MindFuel also reserves the right to contact funded participants, their advisors and organizations to involve them in MindFuel events.

MindFuel does not sell, trade, or rent personally identifiable information (PII) of program participants. For additional information on collection and use of personally identifiable information, visit our website at www.mindfuel.ca/privacy-policy.

Intellectual Property

MindFuel does not claim legal rights on Intellectual Property (IP) developed during the geekStarter period of support.

Publication of Results

Results of the supported research must be available in the public domain. Each principal advisor and the sponsoring institution are encouraged to structure the initiative in a way that permits the publication of non-proprietary research findings in a timely manner. When commercialization of research outcomes is planned, a delay of up to one year in publication or public presentation will be allowed to support filing for intellectual property protection or commercializing findings.

Acknowledging Support

All publications, presentations and public messages including, but not limited to, radio and television interviews, newspaper articles, and so forth arising from the geekStarter program must acknowledge the support of MindFuel as well as Alberta Innovates, as specified at time of onboarding.

Resources Offered by geekStarter (Where Applicable)

1. FINANCIAL SUPPORT

Eligible expenses:

- Equipment, materials and supplies needed to carry out the proposed plan
- Team costs associated with workshops, events and activities relevant to the initiative
- Registration to relevant competitions and/or programs
- Team travel to geekStarter workshops and events
- Team travel to relevant competitions

Ineligible expenses:

- Hospitality and entertaining expenses
- Stipends and salaries

Applicants **must specify all anticipated expenses** as line items in their budget proposal, and **indicate which ones will be covered with the geekStarter grant.**

Applicants must set aside a portion of the grant for costs associated with geekStarter workshops and events, including team travel to such events, as needed.

When unsure about the eligibility of an expense or any other financial matters, applicants must contact the geekStarter program manager in advance of the application deadline.

Grant amounts will vary depending on evaluation results, total number of applicants, and the overall amounts available. Funding is provided to the team's school or organization for distribution through their financial system, paid as one lump sum. Line item reporting on expenditures is required at the close of the award in the final report.

2. WORKSHOPS/EVENTS

Workshops and events form the foundation of geekStarter supported activity. They are designed to help teams acquire and develop skills and competencies relevant to their initiative and specific STEM areas and in accordance to geekStarter's mandate.

geekStarter funded teams must be prepared to facilitate their own workshops, as needed. The geekStarter staff together with geekStarter mentors (if applicable) will be available for assistance and guidance. **In addition to their own workshops, teams must attend relevant multi-team events organized by geekStarter during the season.**

Workshop/event requirements:

- **Individual team workshops:** Although requirements for each initiative will vary, each team will typically hold at least two workshops during the period of support. Team workshops will be tailored to provide extra instruction in skills and competencies relevant to the team and their particular project, and as per geekStarter mandate. Collaboration and sharing of workshops and events with other geekStarter teams in related subject areas, programs or competitions is strongly encouraged.
- **Individual team workshops:** Principal advisors along with teams and mentors (if available) are responsible for determining the team's goals and objectives for each individual workshop. geekStarter staff and mentors will

assist with event planning and delivery, including instructional resources, and travel arrangements for geekStarter mentors, wherever possible.

- **Multi-team geekStarter events/workshops:** Typically held over two days on weekends, these events must be attended by at least 75% of the students on the team. They usually take place at the location of one of the teams, as co-determined by the geekStarter project manager. The co-host team/organization will assist with event planning and delivery, as needed.

3. MENTORS

Mentors are a vital component of the geekStarter program and add significant value to geekStarter projects and initiatives. geekStarter strives to develop and maintain an active mentor community that can be engaged to provide guidance, enrich the experiential learning process, and facilitate knowledge transfer in STEM areas relevant to the initiatives receiving support. Individual mentors may be formally assigned to approved teams based on needs and availability. Out-of-town travel expenses incurred by formally assigned geekStarter mentors are reimbursed directly by geekStarter according to the geekStarter mentorship agreement.

4. SUBJECT MATTER EXPERTS (SMEs)

geekStarter builds and maintains a network of local, national, and international SMEs in fields of expertise relevant to the participant initiatives and projects. Keen to promote the development of skills in cutting-edge STEM research, innovation, and entrepreneurialism, these individuals will generously share their expertise with Alberta's youth. Typically, geekStarter involves the SME's in the evaluation of applications, and invites them as speakers and judges at geekStarter workshops, competitions, and events. Teams are encouraged to access this network through geekStarter in order to enrich students' learning experience and increase their success.

5. SYNTHETIC BIOLOGY GUIDEBOOK

High School synthetic biology (iGEM) teams only.

geekStarter mentors have developed a comprehensive guide to aid high school teams in the planning and execution of synthetic biology projects and to prepare them for participating in the international Genetically Engineered Machines (iGEM) competition. Topics covered include safety, selecting powerful projects, the registry of standard biological parts, and Do It Yourself Biology. This guidebook is available on the program website (www.edacity.ca/geekStarter).

Timeline (tentative, as in most recent season)

TIME	EVENT
Oct - Dec	Applications & Onboarding – Junior & High School teams; Mentors signup
Dec	Multi-team Workshop (focus: design thinking / entrepreneurship)
Jan	Individual team workshop # 1
Mar	Multi-team Workshop (focus: biotech, lab skills)
Apr	Individual team workshop # 2 Multi-team Workshop (focus: robotics)
Apr - June	Applications & Onboarding - Collegiate teams
May - June	Multi-team Workshop – Junior & High School Jamboree
June	Multi-team Workshop – Collegiate Kick-off
Sept	Multi-team Workshop – Collegiate Jamboree

Contact Us

Online

Email: geekstarter@mindfuel.ca
 Corporate site: www.mindfuel.ca
 Program site: www.edacity.ca/geekStarter

Brick & Mortar

MindFuel (located at University Research Park) 260, 3512 – 33 St NW
 Calgary, AB T2L 2A6

The geekStarter program is managed by MindFuel under their Edacity program with the generous support of Alberta Innovates.