geekStarter Program Guidelines

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 exponential technologies and newly emerging STEM fields important to Alberta, such as Synthetic Biology and Nanotechnology, and cutting edge Information and Communication Technologies, such as robotics and machine learning. At the same time, the geekStarter program aims to foster an entrepreneurial mindset in Alberta's 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 all of the subsequent responsibilities.

Eligibility Requirements

1. The initiative's school / organization must be **located in Alberta**.
2. A **faculty 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 faculty 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 faculty advisor(s) and mentors.
4. The initiative must involve hands-on research activities in **emerging STEM fields**, and must provide opportunities for **authentic problem-based learning** and the development of inter-disciplinary and entrepreneurial competencies.
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 Edacity 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 Edacity website and are communicated to prospective teams by the geekStarter project 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. 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 faculty advisor and the 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 faculty advisor, team roster, or any significant changes of the proposal itself.

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Reporting

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, and responses to participant surveys.

A final report is required at the end of the geekStarter period of support. The due date of the report is indicated in the Agreement letter between MindFuel and the host institution. Please note that the report includes individual student reporting, an overall outcomes report, financial reporting and sign off by an authorized financial authority.

Unused Funds

Any funds remaining in the award's related account(s) as of the period of support end date will be re-claimed by 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 faculty 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.

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Publication of Results

Results of the supported research must be available in the public domain. Each faculty 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.

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. When unsure about the eligibility of an expense, applicants must contact the geekStarter program manager in advance.

   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 to increase their knowledge in specific STEM areas.

geekStarter funded teams must be prepared to facilitate their own workshops and events. The geekStarter staff together with team mentors (if applicable) will be available for assistance and guidance.

Workshop/event requirements:

- Although requirements for each initiative will vary, each team will typically host at least one workshop during the period of support. Team-hosted workshops will be tailored to provide extra instruction in skills and competencies relevant to the team and their particular initiative. Collaboration and sharing of workshops and events with other geekStarter teams in related subject areas, programs or competitions is strongly encouraged.
- Faculty advisors along with the teams are responsible for determining the team's goal and objectives for each workshop/event. If needed, geekStarter will be available to assist with event management, including registration, travel arrangements for experts, etc. Potential topics of interest should be included in the team's application.
- geekStarter workshops and events must be attended by at least 75% of the students on the team. Workshops are held at locations as co-determined by the geekStarter project manager.

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 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

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of expertise relevant to the participant initiatives and programs. These SMEs are keen to promote the development of skills in cutting-edge STEM research, innovation, and entrepreneurialism, and will generously share their expertise with Alberta's youth. Typically, geekStarter involves the SME's in the evaluation of applications. and it 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 chance of 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. Faculty advisors are given access to this Guidebook in electronic format for distribution to team members.

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.