



2026-27 PROGRAM YEAR

MISSION GUIDE FOR STUDENTS

A guide for graduate student teams participating in Mission ImpULSEible — program overview, eligibility, timeline, budget, rules, evaluation criteria, and terms of participation.

Program Overview

Mission ImPULSEible is an international, industry-driven applied research program designed to accelerate the adoption of pulse ingredients in commercially relevant value-added food applications. Led by Pulse Canada in collaboration with food manufacturing companies, ingredient suppliers, and universities, the program connects graduate student-led teams with industry-defined technical challenges currently limiting the use of pulse ingredients in food product development.

Each participating food manufacturing company develops one to three mission briefs focused on specific product categories and technical barriers. Graduate student teams submit proposals outlining applied research approaches designed to address these challenges using a curated portfolio of pulse-based ingredients supplied by participating CPSC (Canadian Pulse and Special Crops Trade Association) member companies. Following proposal review, up to five projects may be selected annually to receive funding of up to \$5,000 CAD per project to execute applied research activities during the winter academic term.

The program is designed to generate pre-competitive technical insights that are scientifically grounded, industry-relevant, and directly applicable to food product development. Through this model, Mission ImPULSEible supports early-stage innovation, strengthens university-industry collaboration, and helps advance practical understanding of pulse ingredient performance across food applications.

Eligibility & Team Structure

Participating teams must be composed primarily of graduate students and may include up to four student members. Teams may be interdisciplinary, and cross-university collaborations are permitted, though not required.

Each team must identify a faculty advisor responsible for providing research oversight and approving the final proposal submission. Faculty advisors are not considered formal members of the research team.

Register your team as soon as possible at pulsecanada.com/mission-impulseible. After registering, you'll receive updates by email, including invitations to Q&A periods for helping to develop your proposal.

Program Timeline

Phase	Timing	Key Activities
Program Launch	September 9, 2026	Mission briefs are distributed; teams form and assign faculty advisors.
Phase 1: Proposal Development	Sept – Nov 23, 2026	Teams develop and submit proposals with faculty advisor sign-off. Proposals due November 23, 2026.
Review & Selection	December 2026	Pulse Canada, food manufacturers, and CPSC members review and score submissions; up to five projects are selected.
Phase 2: Project Execution	Jan – Apr	Selected teams conduct research and prototype development.
Mid-Point Review	February	Teams present progress virtually and receive technical feedback.
Final Presentation	April	Teams submit final deliverables and present findings virtually.
Post-Program Synthesis	Post-April	Pulse Canada compiles cross-project insights into a synthesis report.

Budget

\$5,000 CAD

Selected teams receive funding of up to \$5,000 CAD per project to cover consumables and project-related research costs during execution. Budget requests are submitted as part of the Phase 1 proposal; funding is provided by the Canadian Pulse and Special Crops Trade Association (CPSC) and administered by Pulse Canada.

Phase 1: Proposal Development

Each participating food manufacturing company publishes one or more mission briefs. During Phase 1, each team selects one mission brief to respond to. A mission brief defines the product category, market positioning, technical barrier, success and failure criteria, nutritional requirements, and the approved pulse ingredients your team may draw on — teams may only select ingredients from the portfolio specified in their chosen brief.

During the fall term, teams develop a structured proposal outlining their intended approach to the selected mission brief. Proposals must clearly articulate the team's interpretation of the technical challenge, proposed hypothesis, formulation and/or processing strategy, experimental design, planned analytical approaches, and anticipated deliverables.

Teams must submit a detailed budget request of up to \$5,000 CAD, outlining anticipated consumable and project-related research costs, and must identify the selected pulse ingredients from the approved portfolio, explaining how the proposed work aligns with the mission objectives and constraints.

Students must use the provided proposal template for their applications, available at pulsecanada.com/mission-impulseible.

Pulse Canada will coordinate scheduled, structured Q&A sessions during the proposal phase. Teams are encouraged to submit questions in advance, with responses provided during designated virtual sessions. Following an initial administrative screening, eligible proposals are reviewed by participating food manufacturing companies and relevant ingredient processors. Up to five projects may be selected annually to advance to Phase 2.



Proposal Evaluation Criteria

Criteria	Weight
Problem Understanding & Mission Alignment	20%
Experimental Design & Scientific Rigor	25%
Innovation & Problem Solving	20%
Technical Feasibility	20%
Budget & Resource Justification	10%
Proposal Clarity	5%

Phase 2: Execution of Research Plan

Selected teams conduct applied research between January and April, focused on practical formulation development and technical evaluation under the defined constraints of the mission brief. Teams are encouraged to iteratively refine formulations and document both successful and unsuccessful outcomes.

At minimum, teams are expected to develop prototype formulations and conduct basic analytical or functional testing relevant to the mission objectives — this may include texture analysis, hydration or stability measurements, internal sensory observations, or other applied performance assessments.

A structured midpoint check-in is held virtually in February for teams to present progress and receive feedback from Pulse Canada, participating food manufacturers, and relevant CPSC member companies.

Final Deliverables

Deliverable	Description
Technical Report	Summary of objectives, methodology, results, interpretation, and conclusions
Presentation Deck	Final presentation summarizing findings and recommendations
Formulation Records	Detailed formulation sheets and processing notes
Photographic Documentation	Images of trials, prototypes, and relevant observations
Analytical Data Files	Excel or equivalent files containing supporting data and replicates where applicable

Final Project Evaluation Criteria

Criteria	Weight
Technical Performance Against Mission Objectives	30%
Scientific Rigor & Data Interpretation	25%
Innovation & Problem Solving	20%
Alignment with Industry Constraints	10%
Reporting & Communication Quality	10%

Terms of Participation: Governance, Confidentiality & IP

All projects conducted through Mission ImPULSEible are intended to be non-confidential and pre-competitive in nature. Students and universities retain ownership of their work and may publish findings through academic or professional channels.

Participating companies and ingredient suppliers may internally use findings generated through the program to inform future research and development activities, and may independently pursue future intellectual property opportunities based on insights generated. All participating partners will have access to final project reports and synthesized findings.

Communications Guidelines

Program Communication

Questions during the proposal phase should be submitted in advance of scheduled Q&A sessions coordinated by Pulse Canada; responses are shared with all teams during designated virtual sessions to keep guidance consistent across the program.

During Phase 2, teams engage with Pulse Canada and industry partners through the scheduled midpoint review and the final virtual presentation session. Ad hoc questions outside these sessions should be directed to the key contacts.

Use of the Program Logo & Company Names

When referring to the program in reports, presentations, or external communications, use the full name "Mission ImPULSEible" on first reference. Teams may acknowledge Pulse Canada and their industry partner by name in acknowledgements and presentations.

Teams selected to advance to Phase 2 will be provided with official Mission ImPULSEible logo files for use in their technical report, presentation deck, and related final deliverables. The logo may be used only in its provided, unaltered form — do not recolour, distort, crop, or recombine it with other marks — and only to identify participation in the program, not to suggest endorsement of a team's specific findings or formulation by Pulse Canada or any industry partner. Company names and logos belonging to industry partners may only be used with that partner's prior permission.

FAQ

Can teams be interdisciplinary or span multiple universities?

Yes. Teams may be interdisciplinary, and cross-university collaboration is permitted, though not required.

Is the program open to universities outside Canada?

Yes. Mission ImpULSEible is open to graduate student teams internationally.

Can our team select ingredients outside the approved portfolio?

No. Teams may only select ingredients from the approved portfolio identified within their mission brief, to keep projects technically relevant and comparable across teams.

What happens if our project isn't selected for funding?

Up to five projects are funded annually. Proposals not selected do not advance to Phase 2 execution, but teams are welcome to apply in future program years.

Who owns the intellectual property generated through the project?

Students and universities retain ownership of their work and may publish findings. All project work is pre-competitive and non-confidential — participating companies may use insights internally but do not gain exclusive rights.

Is there funding available, and what can it be used for?

Up to five projects are funded annually at up to \$5,000 CAD each, to cover consumables and project-related research costs during Phase 2 execution.

Where can teams get help during proposal development?

Pulse Canada coordinates scheduled, structured Q&A sessions during the proposal phase. See the Proposal Template subsection in Phase 1 for the required submission format.

Key Contacts

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