



APPLIED RESEARCH AND DEVELOPMENT GRANTS FOR COLLEGES APPLICATION CHECKLIST AND PROPOSAL TEMPLATE

This document contains two sections:

- 1. A list that summarizes the factors assessed in the review of an ARD Grant application. Ensure these points are addressed before submitting a proposal. This list is provided for the convenience of applicants. Do not submit this list with the application.*
- 2. A proposed template for the research proposal.*

Section 1: APPLICATION CHECKLIST

Eligibility Questions

College

- Is the college eligible to receive grant funds?

Company Partner

- Does the company meet the eligibility requirements described in the Industrial Participation section of the ARD Grants description?

Overview of the proposal/technical merit

- Is the company-specific problem clearly identified and related to the company's core competencies or activities?
- Is there a clear plan to address the problem and proposed approach to solve it?
- Is the work innovative?
- Does the proposal describe the research challenge to be addressed through the project?
- Is there adequate college support?

Applied research competence

- Does the research team, including company partner's personnel, have the appropriate expertise?
- Is the nature of the expertise described?
- Are Forms 103CV (part one and part two) and/or CVs included for all participants?

Potential for innovation impact

- Will the work lead to new or improved products, processes or services that benefits the company and are directly related to its core operations?
- Will the company see economic or other benefits within a reasonable timeframe?
- Is the impact of the project described?

Private-sector support

- Does the proposal identify how the results will be transferred to the company (i.e. what are the deliverables)?
- Does the proposal indicate how the college will interact with the company personnel to ensure the progress of the project?
- Does the proposal describe the nature of the company participation (characterized by the in-kind contribution)?
- Is the in-kind contribution detailed and in keeping with the NSERC guidelines for eligibility and value of in-kind contributions (such as the maximum hourly rate for salary costs)?
- Does the company contribute the appropriate amount from its own resources?
- Is the company in a position to successfully exploit the research results?
- Does the company letter of support address the points outlined in the Application Procedures section of the Grant description?



Contribution to the training of highly qualified personnel

- Does the proposal include a student training component?
- Is the knowledge and experience gained by students, research administrators and college/company personnel described?

Benefit to Canada

- Are economic, social and/or environmental benefits to Canada described?

Budget

- Does the budget provide enough detail to justify each expenditure?
- Does it conform to the Eligible Expenses section of the Grant description?

Certification requirements/environmental review

- Is an environmental review required for this project? If yes, has an Environmental Information Form (Appendix A) been filled out?

Section 2: *SAMPLE STRUCTURE FOR TEN-PAGE NSERC ARD PROPOSAL*

Synopsis:

Provide a concise overview of the scientific or technical objectives, approach, and the new knowledge, expertise, or technology that could be transferred to Canadian companies. Indicate the benefits expected to accrue to the partner, to the academic institution and to the applied research discipline(s).

Background:

Relate the proposal to current scientific, technical and commercial developments in the field, referring to the current literature and market conditions. Describe the background research on which the project is built.

Detailed proposal:

Discuss the technical issues, applied research problems or technical adaption and transfer challenges, and describe the methodology and experimental design proposed to explain or resolve them. Provide a work plan and relate it to the milestone schedule from the Activity Schedule section. Describe the roles of any students who will be involved in the project. If applicable, explain the need for any additional support staff such as research assistants, technicians or other professional staff who may be required to carry out the project. Note: A sufficient level of detail is required for the external reviewers to be able to assess the team's understanding of the applied research challenge(s), the appropriateness of the proposed approach, and the likelihood of success based on the proposed work plan.



Team expertise:

Explain how the knowledge and experience of each expert relates to the expertise needed to accomplish the project objectives and how the contributions of the team members (including, if applicable, company personnel) will be integrated.

Research management:

If the proposal involves large or dispersed research teams, provide a plan for how the project will be managed to provide both day-to-day direction and research leadership, as well as maintain good communication between the college research group(s) and the private-sector sponsor(s). If applicable, please detail the project manager's qualifications, involvement, role and responsibilities.

Training of highly qualified personnel:

Describe how the knowledge and experience gained by students, research assistants or others, including company personnel, is relevant to innovation and applied research in the private sector. The number of students involved is expected to be commensurate with the size of the project.

Value of the results and relevance to the private sector:

Describe the anticipated value of the project results, highlighting the relevance to the private sector of the scientific or technical advances, or the innovative techniques, processes or products that will be developed or innovatively applied. Clearly identify how the work will benefit the private sector partner(s) by showing how the outcome will address a current or future company or market need. To the extent possible, indicate the additional work the partners will have to do to exploit the results of the applied research for commercialization. Describe how the exploitation of the project results will benefit the Canadian economy within a reasonable time.

Benefit to Canada

As well as the economic benefit to Canada described in the previous section, outline any additional economic, social, and/or environmental benefits that will or could be realized in Canada and the corresponding timeframe.



Metrics:

In addition to the objectives of the project, applicants are encouraged to identify one or two metrics (with targets) that signal broader impacts of the project. Some of the possible metrics might include:

*the number of students involved (part-time job, summer or capstone, but not course involved);
the number of employees trained;
the number of students that are anticipated to go to the partners following the project.*