The **NSERC Collaborative Research and Training Experience in Environmental Innovation** (*Environmental* Innovation) program is looking for graduate students who are interested in northern resource development and environmental sustainability and who want to complete thesis research that will be enhanced by coursework and internship experience with industry, government, and/or aboriginal organizations. Admission of graduate students will occur over the next several years, in either September or January, beginning as early as September 2014. Recruitment of northern and aboriginal students is a program priority.

Faculty are encouraged to participate in the *Environmental Innovation* program. In particular, supervisors are expected to be actively engaged in helping to develop the *Environmental Innovation* program and enhance the training capacity in environmental assessment, monitoring and management. Supervisors can contribute to design/content/delivery of courses, seminars, workshops, and other related activities accessible to the broader *Environmental Innovation* community.

**How to Proceed:**

Visit [www.mcgill.ca/create-ei](https://exchange.mcgill.ca/owa/redir.aspx?C=9Kfm7E-1C06VoJRfYuXRolNYdZIPQ9EIFhzAIderkGkKId0qvGbMWMcrOC3luRwib9LNmmubL0c.&URL=http%3a%2f%2fwww.mcgill.ca%2fcreate-ei) for more details, including researchers and collaborators involved in the program. Once the candidate student-supervisor-project is identified, complete the following form (adding space as needed) and send with required attachments to the program coordinator [manuelle.landry-cuerrier@mcgill.ca](mailto:manuelle.landry-cuerrier@mcgill.ca).

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| **Admission Form for NSERC CREATE EI Graduate Program** | | | | | | | | | | | | | | | |
| Name of the student : | | | |  | | | | | | | | | | | |
| Name of the supervisor : | | | |  | | | | | | | | | | | |
| Proposed start : | | | | (semester) / (year) | | | | | | | | | | | |
| Training level: | |  | MSc | | |  | PhD | |  | | PDF |  | |  | |
|  | | | |  | | | | | | | | | | | |
| 1a. Project title : | | | |  | | | | | | | | | | | |
| 1b. Project summary : | | | |  | | | | | | | | | | | |
| 1c. Relevance of the proposed project to the objectives and scope of the  CREATE – Environmental Innovation program: | | | |  | | | | | | | | | | | |
| 1d. This CREATE program is called *Environmental Innovation*. What is really innovative about this research? | | | |  | | | | | | | | | | | |
| 2a. Proposed internships (at least two, with some or all of the following types of organizations: industry, government, indigenous organization, ngo, etc.): | | | |  | | | | | | | | | | | |
| 2b. If proposed internship host is not already listed as a collaborator, describe organization, identify contacted or potential contact person: | | | |  | | | | | | | | | | | |
| 3a. Student external funding, if any (include source, years, and amounts): | | | |  | | | | | | | | | | | |
| 3b. Stipend request from CREATE, if any (include years and amounts): | | | |  | | | | | | | | | | | |
| 4. Supervisor contribution statement (include details of planned contributions to the program curriculum development): | | | |  | | | | | | | | | | | |
|  | | | |  | | | | | | | | | | | |
| Student’s Current Knowledge & Desired Training | | | | | | | | | | | | | | | |
| For each of the core course module and component combination in the table on the next page, the student’s current knowledge (K) and desired training (T) should be indicated with numbers from 1 to 5 according to the below scale. | | | | | | | | | | | | | | | |
|  | *I know nothing* | | | |  | | | *Knowledge (K)* | |  | | | *I have extensive knowledge* | |
|  | *1* | | | | *2* | | | *3* | | *4* | | | *5* | |
|  | *Just the basics please* | | | |  | | | *Desired Training (T)* | |  | | | *I want to be an expert* | |

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| |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | *Component* | | | | | | | | | | | | Module | *A* | | *B* | | *C* | | *D* | | *E* | | | | Indigenous Rights & Engagement. | Indigenous Peoples of Canada, historical treaty rights, modern land claim agreements | | Understanding traditional knowledge and its use and misuse in environmental policy | | Indigenous vs. scientific knowledge: intersections, conflicts, and best practices. | | Beyond consultation: common ground modes of knowledge production. | | Indigenous Peoples & natural resource development: biggest disasters, best successes. | | | | ***Insert numbers here*** | K | T | K | T | K | T | K | T | K | T | | |  |  |  |  |  |  |  |  |  |  | | | Natural Resource Economics, Industry, & Regulation | Natural resources as commodities: economic and political drivers of development. | | Natural resource industry 101: (resources, extraction, environmental impacts, new technologies) | | Legal and regulatory frameworks affecting natural resource development | | Ecosystem services and integrated indicators of economic, environmental and social well-being. | | The future of the natural resource industry in Canada. | | | | ***Insert numbers here*** | K | T | K | T | K | T | K | T | K | T | | |  |  |  |  |  |  |  |  |  |  | | | Ecoinformatics Data Analyses, & Experimental Design | Data management principles, SQL query coding, and ecological study design. | | Data Analytics Visualization,including R and GIS. | | Species niche-modelling | | Resource-selection function (RSF) analyses. | | Principles of adaptive sampling and model validation | | | | ***Insert numbers here*** | K | T | K | T | K | T | K | T | K | T | | |  |  |  |  |  |  |  |  |  |  | | | Model Development & Scenarios | Use and misuse of models in ecology, by industry, and by society | | Ecological and environmental modeling techniques. | | ALCES: A Landscape Cumulative Effects Simulator | | Scenario planning in socioecological systems | | Modelling the future and communicating uncertainty | | | ***Insert numbers here*** | K | T | K | T | K | T | K | T | K | T | | |  |  |  |  |  |  |  |  |  |  | | |

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| What is the student’s post-graduation career aspiration? | | |  | | |
| What is the student’s dream job? | | |  | | |
|  | | |  | | |
| Has this student been made aware that being involved in the CREATE program requires completion of internships and participation in course work above and beyond the usual requirements of graduate degrees and PDF training? | | | | |
|  |  | Yes | | |
|  |  | No | | |
| Is this student interested in contributing to CREATE core course development and delivery? | | | | |
|  |  | Yes | | |
|  |  | No | | |
| Is this student interested in contributing to the CREATE eye opener course content and delivery? | | | | |
|  |  | Yes | | |
|  |  | No | | |
|  | | | | |
| Attachments | | | | |
|  |  | Student CV | | |
|  |  | Student transcripts | | |
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