



**Tier 2 Canada Research Chair in
AI-driven Navigation for Arctic and Harsh Environments**

**Department of Mechanical and Mechatronics Engineering
Faculty of Engineering and Applied Science**

Posting Date: **April 1, 2026**

Closing Date: **April 30, 2026**

The [Department of Mechanical and Mechatronics Engineering](#), Faculty of Engineering and Applied Science, Memorial University, is currently undertaking an open, internal search to recruit and nominate a candidate for an NSERC Tier 2 *Canada Research Chair in AI-driven Navigation for Arctic and Harsh Environments*.

In accordance with [Canada Research Chair Program requirements](#), the competition is open to all applicants who:

- are current employees of Memorial University; and
- identify as members of one or more of the following groups: women and gender-equity-seeking groups, racialized individuals, Indigenous Peoples, and persons with disabilities, as per approval granted by Newfoundland and Labrador's Human Rights Commission, pursuant to Section 8 of the Human Rights Act.

The [Canada Research Chairs \(CRC\) Program](#) offers eligible Canadian degree-granting institutions the opportunity to nominate a diverse cadre of outstanding researchers for professorships in areas that will further an institution's strategic research plan, enabling them to maximize their contributions as centres of research and research training. [Tier 2 CRCs](#) are appointed for a term of 5 years at a value of \$100,000 per year (plus an additional \$20,000 annual research stipend for first-term Tier 2 Chairs), with the possibility of renewal for an additional 5 years. Answers to common questions about the CRC program can be found on the Program's [Q&A webpage](#).

Tier 2 Chairs are intended for exceptional emerging scholars (i.e., candidates must have been an active researcher in their field for fewer than 10 years at the time of nomination). Applicants who are more than 10 years from having earned their highest degree, and where career breaks exist, such as maternity, parental or extended sick leave, clinical training, etc., may have their eligibility for a Tier 2 Chair assessed through the CRC's [Tier 2 justification process](#). For any questions related to the Tier 2 justification process, please email Research Initiatives and Services (RIS) (ris@mun.ca) with the subject heading *CRC Tier 2 Justification process*.

The Chair's start date will be contingent upon the timing of the successful CRC application, and the salary will be commensurate with qualifications and experience, in accordance with the Memorial University of Newfoundland Faculty Association (MUNFA) Collective Agreement.

Research

The Department of Mechanical and Mechatronics Engineering offers undergraduate degree programs in Mechanical Engineering and Mechatronics Engineering, as well as thesis-based graduate programs leading to master of engineering (MEng) and doctor of philosophy (PhD) degrees. Mechanical engineering research facilities include automation and control, computer, fluids, heat transfer and structures laboratories. Memorial has a strong commitment to interdisciplinary research and teaching, and the successful nominee will be required to contribute to teaching in both the Department's undergraduate and graduate programs.

There are extensive opportunities available at the University for collaborations across many disciplines. The successful nominee will be encouraged to strengthen and expand departmental ties with other disciplines (locally, nationally, and internationally) through collaborations in both research and teaching. The Department is committed to increasing diversity, and, to support this goal, the Department provides a team approach to mentorship as well as many additional supports for new academic staff.

Candidate Profile

The successful applicant will have:

- a strong record in Mechatronics Engineering; a PhD* (*Note: this is a requirement of Memorial University, not the CRC Program);
- evidence of a strong record of research training (i.e., HQP) supervision;
- a demonstrated, or the ability to demonstrate, record of conducting research in one or more of the following areas, i) AI for arctic and sea ice operations, ii) multi-sensor navigation in harsh environments, iii) resilient GPS-denied navigation, iv) data and situational awareness, and v) decision-making and certification;
- a demonstrated, or the ability to demonstrate, independent, externally funded research program that uses both theory and field evaluations of research questions in harsh environments and navigation, involving field data capture, hardware development, and data processing;
- a demonstrated, or the ability to demonstrate, research leadership in the area of harsh-environment navigation, institutional research leadership through building research collaborations in Memorial, being an expert point of contact, and leading the effort to seek major external funding in the research domain, and enhance Memorial's national profile by organizing and contributing to national symposia, workshops, international conferences, and expert panels in a research leader capacity on harsh-environment navigation.

How to apply

Stage 1: Applications must be emailed as a single PDF file, with the subject heading: “**CRC applicant_(YOUR NAME)**,” to: Dr. Geoff Rideout, Head of Department of Mechanical and Mechatronics Engineering (engr.mech@mun.ca). The application package must include the following information**:

1. a cover letter, highlighting the applicant’s qualifications;
2. a complete, up-to-date curriculum vitae, including information on the applicant’s HQP training;
3. a summary of the proposed research program (no more than five pages);
4. a HQP training plan, and;
5. names and contact details for three referees.

*** Please note that Memorial University’s [Indigenous Verification Policy](#) came into effect on February 25, 2026. Additional information may be required from applicants, subject to the Policy and its procedural guidance.*

Stage 2: Working with the Department, Faculty, and Memorial’s [Research Initiatives and Services](#) (RIS) office, the successful candidate will complete the CRC application. Once completed, the application will be submitted to the CRC Program. Please note that nominees only become Chairholders if the submitted nomination has been approved by the CRC Program.

For any inquiries regarding this position, please contact Dr. Geoff Rideout, Head of Department of Mechanical and Mechatronics Engineering (engr.mech@mun.ca). We thank all interested candidates, but only those selected for an interview will be contacted further.

Memorial acknowledges that career paths can be diverse and that life circumstances, such as illness, disability, and family and community responsibilities, are often an expected part of life and are likely to affect a candidate’s record of research achievement. Applicants are encouraged to explain in their cover letter any life circumstances that may have resulted in career interruptions, if applicable. These impacts will be carefully considered during the assessment process.

Memorial University is committed to employment equity, diversity, inclusion and anti-racism, and encourages applications from all qualified candidates who are eligible to apply in accordance with the aforementioned CRC Program requirements. All applicants are invited to identify themselves as a member of an equity-deserving group(s) as appropriate. Please note that applicants cannot be considered as a member of an equity-deserving group(s) unless they complete an employment equity survey.

All applicants will receive the employment equity survey link by email after submitting their application. If you do not see the email in your inbox, please check your junk or spam folder. The survey link will remain active until 11:59 p.m. NST, May 4, 2026. If you do not receive the survey or have any questions about it, please contact Mandy Penney, Employment Equity Officer, (equity@mun.ca).

Memorial is committed to providing an [inclusive learning and work environment](#). Applicants who require an accessibility arrangement to ensure their full participation in the application process, can contact Mandy Penney (equity@mun.ca) to make appropriate accommodations.

Memorial University

As Newfoundland and Labrador's only university, [Memorial University](#) plays an integral role in the education and cultural life of the province, offering diverse undergraduate and graduate programs to more than 17,000 students from over 120 countries. Memorial's St. John's campus provides a distinctive and stimulating environment for learning in the capital city. Home to many natural wonders, including a puffin colony, whales, and icebergs, St. John's is steps away from the Atlantic Ocean, with a vibrant arts and culture scene, mild temperatures, and access to a wide range of outdoor activities in all seasons.

We acknowledge that the lands on which Memorial University's campuses are situated are in the traditional territories of diverse Indigenous groups, and we acknowledge with respect the diverse histories and cultures of the Beothuk, Mi'kmaq, Innu and Inuit of the Province.