

University of British Columbia - Okanagan Campus
Faculty of Applied Science
School of Engineering

Canada Research Chair (Tier I) in Resilient Infrastructure

Date posted: December 10, 2024

Closing date: February 23, 2025

Situated on the traditional, ancestral, unceded territory of the Syilx Okanagan Nation, the Faculty of Applied Science's School of Engineering at the University of British Columbia (UBC) Okanagan campus invites applications for a Tier I Canada Research Chair (CRC) in Resilient Infrastructure in the Natural Sciences and Engineering Research Council (NSERC) stream. The Chair position is expected to be a full-time tenured appointment made at the rank of Associate Professor or Professor. The anticipated start date is April 1, 2026, or soon thereafter.

The UBC Okanagan campus has identified climate adaptation and disaster resilience as core areas of scholarly activity. The allocation of strategic support for research in these areas is central to the institution's revised Outlook 2040 vision, which directly aligns with a Climate Emergency Declaration made by UBC in 2019 and the 2022 Government of Canada National Adaptation Strategy. As part of this commitment, UBC Okanagan has initiated a cluster hire of three NSERC Canada Research Chairs in the Faculties of Science, Applied Science (School of Engineering) and Health and Social Development. The NSERC Tier-I CRC in Resilient Infrastructure in the School of Engineering is one of the three Chairs that will be recruited as part of the UBC Okanagan cluster hire initiative.

The Faculty of Applied Science **Tier 1 CRC in Resilient Infrastructure** provides a unique opportunity for a researcher focused on climate change and natural hazards, and their potential impacts on infrastructure and communities. The world is facing unprecedented natural hazards—including wildfires, floods, heatwaves, and landslides—that are often interrelated and severely impact public safety, productivity, and quality of life. Climate change, being the key cause, has increased the uncertainty, intensity, and frequency of such hazards. Given the broad continuum of the magnitude and impact of these hazards, the need for safe and resilient infrastructure and communities has never been so acute. The research program will guide Canada toward resilient infrastructure and communities. By taking an inclusive governance approach accounting for interrelationships of primary and secondary natural hazards, the multidisciplinary research program will produce solutions for next-generation adaptive and smart infrastructure as well as safer and more resilient communities. Recent disasters in various parts of the world have disproportionately affected disadvantaged and Indigenous communities, demonstrating the critical need to engage Indigenous, government, and community stakeholders for knowledge mobilization, realizing design solutions and improving the current practices in resilient infrastructure and communities. The program is expected to build on the infrastructure system of the climate change resilience framework outlined in the National Adaptation Strategy

<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy/full-strategy.html#toc11>

Tier 1 Chair holders must be Professors or Associate Professors who are expected to be promoted to the Professor within one or two years of the nomination. Applicants must therefore meet the criteria for appointment as a tenured Professor or Associate Professor in the School of Engineering at the University of British Columbia, Okanagan as well as the eligibility requirements for a Tier 1 CRC position. The anticipated salary range is \$195,000 to \$257,500.

Tier I Canada Research Chair positions have a term of seven years which may be renewed once for a second seven-year term. They are intended for outstanding researchers acknowledged by their peers as world leaders in their fields. Nominees for a CRC Tier 1 must be: (a) outstanding and innovative world-class researchers whose accomplishments have made a major impact in their fields; (b) recognized internationally as leaders in their field; (c) proposing an original, innovative research program of the highest quality; and (d) must have superior record of attracting and supervising graduate students and postdoctoral fellows (taking into account different practices in the relevant field or discipline) and are expected to attract, develop and retain excellent trainees, students and future researchers. All CRC nominations are subject to review by the CRC Secretariat, and appointment as a CRC is conditional upon their approval. Please consult the Canada Research Chairs website for full program information, including further details on eligibility criteria.

The successful candidate must hold a PhD in civil engineering or a related discipline and be registered, or be eligible to register, with Engineers and Geoscientists of British Columbia (<https://www.egbc.ca>). They will bring a breadth of expertise and have a strong track record of scholarly eminence including an independent, internationally-recognized research program, demonstrated evidence of success and excellence in teaching, and participation in academic and professional affairs. Additionally, they will have a strong commitment to equity, diversity and inclusion, to create a welcoming community for all, particularly those who are historically, persistently or systematically marginalized. The successful candidate will be expected to lead an innovative research program in resilient infrastructure; foster collaborative and interdisciplinary research; articulate a strategic plan for developing an exemplary research program that complements ongoing research programs at UBC and engages with local, national, and international research networks; play an active role in collaborating with a diverse group of researchers across UBC and local industry; teach at the undergraduate and graduate levels; supervise and mentor Master's and Ph.D. students; and provide service to the University and the community.

This research program will build upon UBC Okanagan's School of Engineering expertise in infrastructure management and community-based climate adaptation and mitigation. UBC Okanagan's reputed centers of excellence are engaged in cutting-edge research promoting resiliency and sustainability in the built environment. Contributions made by these centers are well recognized by governments, funding agencies, and industry leaders for their innovation and excellence. UBC is equipped with state-of-the-art testing and research facilities and technologies meeting global standards in the proposed field of research. Cross-campus initiatives within this area, including the Materials and Manufacturing Research Institute (MMRI), Green Construction Research & Training Centre (GCRTC), Build Better Research Cluster, UBC Centre for Wildfire Coexistence, and the UBC Disaster Resilience Research Network will provide synergistic opportunities for trans-disciplinary collaboration. Moreover, UBC has also well-established partnerships with industry leaders and design codes' committees who will play critical roles in translating research outputs into practical solutions.

Application Process

In accordance with UBC's [CRC Equity, Diversity, & Inclusion Action Plan](#), and pursuant to Section 42 of the BC Human Rights code, the selection will be restricted to members of the following federally designated groups: Women and gender equity-seeking groups, Racialized individuals (members of groups that are racially categorized), persons with disabilities, and Indigenous Peoples.

Applicants to CRC positions are asked to complete this equity survey: [https://ubc.ca1.qualtrics.com/jfe/form/SV_6WJHol7SfPxRMu9] as part of the application, and candidates from these groups must self-identify as belonging to one or more of the federally designated equity groups to be considered for the position. Because the search is limited to those self-identifying as members of designated equity groups, candidates must also provide their name in the survey to be considered.

Personal information is collected under the authority of sections 26(a), 26(c) and 26(e) of the BC Freedom of Information and Protection of Privacy Act. The information you provide will be used to determine whether you qualify for participation in this restricted process, and to advance accessibility, equity, and fair adjudication in this process. Data will be collected by the Equity & Inclusion Office and only the names of those eligible for the search process will be shared confidentially with the search committee. All responses will be stored in a secure database.

The application package should include

- cover letter (up to 2 pages) addressing the applicant's interest in, and suitability for, the Tier I CRC
- a full Curriculum vitae (no page limit)
- Quality of the nominee i.e., research/leadership excellence (up to 1 page)
- Proposed research program (up to 4 pages)
- HQP training plan (up to 1 page)
- Statement addressing how they will contribute to an equitable and inclusive academic environment at UBC (up to 1 page)
- Copies of two major publications
- Name and contact information for four potential referees who meet the Canada Research Chairs Program's conflict of interest requirements. (Please note reference letters will not be solicited at this time).

Interested candidates are invited to submit an application package online at https://ubc.wd10.myworkdayjobs.com/en-US/ubcfacultyjobs/details/Canada-Research-Chair--Tier-I--in-Resilient-Infrastructure_JR19467. As indicated above, applicants must also complete this equity survey as part of the application. [https://ubc.ca1.qualtrics.com/jfe/form/SV_6WJHol7SfPxRMu9]. Should you have any administrative questions regarding this position, please contact Jana Sanetrik at jana.sanetrik@ubc.ca. Academic enquiries can be directed to Will Hughes, Director for the School of Engineering at will.hughes@ubc.ca.

Complete application packages are required by 11:59 pm PST, February 1st, 2025. The successful applicant will be required to prepare a CRC package by August 15, 2025, UBC's internal deadline for the October

2025 CRC deadline. The earliest anticipated start date for this position is April 1, 2026, or upon a date to be mutually agreed and is contingent on CRC approval and UBC budgetary approval.

UBC acknowledges that certain circumstances including COVID-related research interruptions and eligible leaves (e.g., maternity, parental, medical, bereavement) may cause career interruptions that legitimately affect an applicant's record of research achievement. These interruptions will be taken into careful consideration during the assessment process. We encourage applicants to highlight in their application how interruptions have impacted their career in order to allow for a fair assessment of their research productivity.

UBC is committed to creating and maintaining an inclusive, non-discriminatory and accessible work environment for all members of its workforce, and in particular, for its employees with disabilities. Additionally, an inclusive work environment for employees with disabilities presumes an environment where differences are accepted, recognized, and integrated into current structures, planning, and decision-making modes. We welcome colleagues with the experiences and skills to contribute to our principles of inclusion, equity, and diversity throughout campus life. UBC is also committed to ensuring that the application and interview process is accessible to all applicants. If you require accommodations or have questions about UBC benefits, services or accommodations policies, please contact Jacky Ivans, Relocation and Benefits Associate at jacky.ivans@ubc.ca . If you have any questions regarding accommodations or accessibility during the recruitment and hiring process or for more information and support, please visit UBC's [Centre for Workplace Accessibility](#) via email at workplace.accessibility@ubc.ca. To learn more about how the University is working to create a more inclusive working and learning environment, please see the UBC Inclusion Action Plan's goals related to recruitment and retention at [this link](#).

Equity, diversity, and inclusion are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person. All qualified candidates who are from at least one of the federally designated groups (FDG) are encouraged to apply. However, Canadians and permanent residents to Canada will be given priority.

To learn more about how the University is working to create a more inclusive working and learning environment, please see the UBC Inclusion Action Plan's goals related to recruitment and retention [<https://equity.ubc.ca/about/inclusion-action-plan/recruitment-retention-and-success>]

UBC is consistently ranked among the top 20 public universities in the world and is a renowned global institution for teaching, learning and research. Since 1915, UBC has been opening doors of opportunity for people with the curiosity, drive and vision to shape a better world. Today, our students, faculty and staff come from around the world and our international research partnerships and publications enable us to collaborate on a global scale. UBC is proud to nurture and transform the lives of more than 65,000 students from Canada and 140+ countries around the world.

With 10,000 undergraduates and over 1,000 graduate students, UBC's Okanagan campus has grown to be a diverse and vibrant part of the Okanagan community. Kelowna is connected by direct flights to major



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Canadian and some USA cities and the region is considered one of the most desirable to live in Canada. For more information about the Okanagan Campus, see <https://ok.ubc.ca>.

UBC's Faculty of Applied Sciences comprises a unique constellation of disciplines across both campuses. Our core purpose is to discover, design, innovate, provide unwavering top-tier education, and champion a community of responsible professionals. UBC Okanagan's School of Engineering is an integral part of the Faculty of Applied Sciences and is based in our Kelowna campus, on the traditional, ancestral, and unceded territory of the Syilx Okanagan People. Founded in 2005, the School of Engineering is among the fastest growing post-secondary engineering programs in Canada and a premier destination for exceptional engineering education and research. Today, the School offers undergraduate programs in civil, electrical, manufacturing, mechanical, and computer engineering and three graduate degrees (MEng, MASc, PhD) that continue to respond to the demands of local, national, and global communities.