**Tier 2 Canada Research Chair Faculty Position in Supercomputing
and High-Performance Computing
Department of Electrical and Computer Engineering
Queen's University at Kingston, Canada**

Posted: May 29, 2025
Revised: December 15, 2025

Queen's University is situated on traditional Anishinaabe and Haudenosaunee Territory.

The [Department of Electrical and Computer Engineering](#) in the [Stephen J. R. Smith Faculty of Engineering and Applied Science](#) at [Queen's University](#) invites applications for **a tenure-track/tenured Tier 2 Canada Research Chair position at the rank of Assistant or Associate Professor with specialization in supercomputing, high performance computing, and extreme-scale systems**. Applicants with expertise in computing systems for modelling and simulation, digital twins, and AI infrastructure are especially encouraged to apply. The position will continue to support research at Queen's University in the growing specialty of Supercomputing and High-Performance Computing and will expand the successful Computer Engineering program at Queen's, which already includes 38 full-time Faculty and over 200 graduate students and postdocs. The preferred start date for the position is July 1, 2026.

Tier 2 Canada Research Chair
Canada Research Chairs were established as part of a national strategy to foster research excellence (www.chairs-chaires.gc.ca). The successful candidate must submit an external application to the Tri-agency Institutional Program Secretariat that meets the requirements for the successful nomination of Tier 2 Chair as defined by the Canada Research Chairs Program:

- be an excellent emerging world-class researcher who has demonstrated particular research creativity;
- have demonstrated the potential to achieve international recognition in their field in the next five to ten years;
- have the potential to attract, develop and retain excellent trainees, students and future researchers; and
- be proposing an original, innovative research program of high quality.

Decreased teaching and administrative responsibilities will be associated with this position to enable the candidate to develop a world-class research program.

Queen's University, Smith Engineering
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Qualifications
The ideal candidate will have:

- a PhD or equivalent degree completed at the start date of the appointment (Note: the requirement for a PhD is that of the University and not the CRC program).
- a background in supercomputing systems and a solid understanding of the challenges of building and operating large supercomputers.
- the ability to design and build supercomputers and be familiar with the components and overall system design.
- extensive experience with building, improving, and using software on supercomputers, direct experience with large supercomputers with traditional batch systems like Slurm and expertise with Message Passing Interface, collective communication libraries like NCCL/RCCL and experience with high performance computing middleware is highly desirable. Optimizations of large parallel code bases and experience with GPU programming languages such as CUDA and HIP is an asset. Candidates should have strong backgrounds in C and/or C++ programming, have knowledge of shared memory programming models like OpenMP and hybrid MPI+X models.
- enthusiasm about teaching supercomputing/HPC to diverse groups.

The main criteria for selection are:

- evidence of high-quality scholarly research expertise that complements existing research areas in the department that is demonstrated through peer reviewed publications and external research funding;
- demonstrated aptitude for teaching courses at the undergraduate and graduate levels, with a clear commitment to academic and pedagogical excellence;
- evidence of an ability to work collaboratively in an interdisciplinary and student-centered environment;
- Professional engineering licensure in Canada, or the eligibility to obtain licensure, is a requirement. Note that all forms of engineering licensure in Canada are considered acceptable (e.g. P.Eng., temporary engineering license, provisional engineering license, etc.).
- Postdoctoral and/or industrial experience will be considered an asset;

The successful candidate will be required to make contributions through service to the Department, the Faculty, the University, and/or the broader community. Salary will be commensurate with qualifications and experience.

CRC Tier 2 candidates with more than 10 years from their highest degree at the time of nomination may have their eligibility for a Tier 2 Chair assessed through the program's Tier 2 justification process. Acceptable justifications are generally limited to breaks in the candidate's research career due to maternity or parental leave, extended sick leave, clinical training, and family care. Please contact research@queensu.ca if you desire more

information on the Tier 2 justification process. In addition, the impact of certain circumstances (including but not limited to parental leave, family responsibilities, illness, disability, research in emerging fields, limited access to resources) that may legitimately affect a nominee's record of research achievement will be given careful consideration when assessing the nominee's research productivity. Candidates are encouraged to provide any relevant information about their experience and/or career interruptions to allow for a fair assessment of their application.

Vaccination Requirements
Prior to May 1, 2022, the University required all students, faculty, staff, and visitors (including contractors) to declare their COVID-19 vaccination status and provide proof that they were fully vaccinated or had an approved accommodation to engage in in-person University activities. These requirements were suspended effective May 1, 2022, but the University may reinstate them at any point.

The Faculty and Department
Queen's University is one of Canada's leading research-intensive universities with a global reputation and is a recognized leader in Canadian higher education. The Department of Electrical and Computer Engineering has 38 full-time and 7 cross-appointed faculty, 927 undergraduate students, and over 200 masters and doctoral students. The Department is home to the Queen's Centre for Energy and Power Electronics Research (ePOWER) and has connections to a number of multi-disciplinary Centres such as the Ingenuity Labs Research Institute, Human Mobility Research Centre, CMC Microsystems, Nanofabrication Kingston, Green Centre Canada, Innovation Park, and the Dunin-Deshpande Queen's Innovation Connector.

Among our top priorities in Smith Engineering is providing opportunities for early career academics to develop exceptional research and teaching contributions while fostering an inclusive environment where all faculty can thrive. Support for faculty to develop strong research programs includes Special Research Grant opportunities, grant writing workshops and review services, and one-to-one mentorship from experienced colleagues.

Smith Engineering understands that we need to focus on making Engineering for Everyone and is working toward a more diverse and inclusive community in an effort to make our learning and working environment better, and to advance the practice of engineering. The Faculty strives to make a difference through commitments such as the establishment of a Chair for Women in Engineering to improve the proportional representation of women in engineering, the new Engineering Strategic Plan, the dynamic outreach programs including Indigenous Futures in Engineering and Black Youth in STEM.

Institution
Queen's University has a long history of scholarship, discovery, and innovation that shapes our collective knowledge and helps address some of the world's most pressing concerns.

Home to more than 25,000 students, Queen's offers a comprehensive research-intensive environment. Diverse perspectives and a wealth of experience enrich our students and faculty while a core part of our mission is to engage in international learning and research.

In 2024, for the fourth year in a row, Queen's University has [ranked in top 10 globally Times Higher Education Impact Rankings](#), securing the position of third worldwide and first in North America. The rankings measured over 2,100 post-secondary institutions on their work to advance the United Nations' Sustainable Development Goals (SDGs).

A member of the U15 group of Canadian research universities, Queen's is home to a vibrant research community that includes 33 Canada Research Chairs and over 20 research institutes who work in partnership with communities, governments, and industry to advance research and innovation, making a measured impact on Canada and the world.

Faculty and their dependents are eligible for an extensive benefits package including prescription drug coverage, vision care, dental care, long term disability insurance, life insurance and access to the Employee and Family Assistance Program. Employees also participate in a pension plan. Tuition assistance is available for qualifying employees, their spouses and dependent children. Queen's values families and is pleased to provide a 'top up' to government parental leave benefits for eligible employees on maternity/parental leave. In addition, Queen's provides partial reimbursement for eligible daycare expenses for employees with dependent children in daycare. Details are set out in the Queen's-QUFA Collective Agreement. For more information on employee benefits, see [Queen's Human Resources](#).

Queen's University has many institutional supports in place for these values and regularly monitors and reports on its progress in achieving inclusive goals. Queen's University demonstrates its commitment to advancing diversity and inclusion by ongoing self-study and by implementing best practices on an ongoing basis. The research community at Queen's is committed to and recognizes that building a culture of diversity is a socially responsible approach that actively removes discrimination and barriers to inclusion to provide benefits that reach beyond Queen's University. At Queen's, we recognize that diversity advances research for the greater good by valuing alternate perspectives, thereby unlocking creative potential and stimulating novel collaborations. To that end, Queen's values its responsibility to promote equity in the employment of women, racialized/visible minorities, Indigenous Peoples, and persons with disabilities; Queen's is an advocate for equity within the Canada Research Chairs Program. Queen's commits to evaluating representation of the four Designated Groups listed above within its Canada Research Chair Program and commits further to striving proactively to meet and to maintain its equity targets among the exceptional researchers recruited to this program.

Additional information about Queen's University can be found on the [Faculty Recruitment and Support website](#).

The City
The University is situated on the traditional territories of the Haudenosaunee and Anishinaabe, in historic Kingston on the shores of Lake Ontario. Queen's is an integral part of the Kingston community, with the campus nestled in the core of the city, only a 10-minute walk to downtown. Kingston's residents enjoy an outstanding quality of life with a wide range of cultural and creative opportunities, with access to many natural areas and proximity to vibrant First Nations Communities including Tyendinaga and Akwesasne. Kingston is a unique Canadian city of 125,000 with a distinct blend of history, recreation, industry, and learning. Kingston offers waterfront living with many recreational opportunities. It is within a two-and-a-half hour drive (two-hour train ride) to the commercial, industrial and political hubs of Toronto, Montreal, and the nation's capital, Ottawa, and a thirty minute drive from the international bridge linking Ontario and upstate New York. The city is also the origin of the historic Rideau Canal system – a UNESCO International Heritage site, and is close to Frontenac Provincial Park, the Thousand Islands National Park, and the Frontenac Arch UNESCO World Biosphere Reserve. The Queen's University Biological Station, north of the city, encompasses 34 km2 of diverse lands, affording premier learning and research opportunities. Visit Inclusive Queen's for information on equity, diversity and inclusion resources and initiatives.

How to Apply
The University invites applications from all qualified individuals. Queen's is strongly committed to employment equity, diversity and inclusion in the workplace and encourages applications from Black, racialized/visible minority and Indigenous people, women, persons with disabilities, and 2SLGBTQ+ persons.

In accordance with Canadian immigration requirements, Canadian citizens and permanent residents of Canada will be given priority, including any qualified individuals who have a valid legal work status in Canada. Please indicate in your application if you have a valid legal work status in Canada. Applications from all qualified candidates will be considered in the applicant pool.

In addition, the impact of certain circumstances that may legitimately affect a nominee's record of research achievement will be given careful consideration when assessing the nominee's research productivity. Candidates are encouraged to provide any relevant information about their experience and/or career interruptions.

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant's accessibility needs. If you require accommodation during the interview process, please contact Ms. Shelly Stilson in the Department of Electrical and Computer Engineering, at ecesearch@queensu.ca.

Those interested in this position should submit a complete application package, including the following documents:

- a cover letter, indicating whether or not you have a valid legal work status in Canada;
- a current Curriculum Vitae (including a list of publications and, funding secured and pending);
- a statement of research interests, including your research vision for the next 5 years;
- a statement of teaching interests and experience (including teaching outlines and evaluations if available);
- a statement identifying their strengths and experiences with, and commitment to, facilitation and promotion of Indigenization, equity, diversity, inclusion, anti-racism, and accessibility;
- three sample publications; and,
- the names and contact information of three referees.

Applicants are encouraged to apply and upload all documents in their application packages electronically as PDF's on the following website: https://apply.smithengineering.queensu.ca/123952. The deadline for applications is **January 31, 2026**; however, applications will continue to be reviewed until the position is filled.

Academic staff at Queen's University are governed by a Collective Agreement between the University and the Queen's University Faculty Association (QUFA), which is posted at Collective Agreements / LoU's / MoA's | Faculty Relations Office and at http://www.qufa.ca/.

Appointments are subject to review and final approval by the Provost. Only nominees external to Queen's University will be considered. (Please note that, for the purposes of this competition, Queen's Term Adjuncts and Adjunct-1s will be considered as external nominees).