



Department of Electrical and Computer Engineering, Microelectronic Devices and Circuits

The Department of Electrical and Computer Engineering (ECE), University of Waterloo, invites applications for two tenure-track positions at the ranks of Assistant Professor in the following areas with the expectation of interdisciplinary collaborations:

- **Electronic Materials and Devices:** Synthesis, processing, and characterization of thin films, nano-materials, and heterostructures with a focus on device fabrication and integration technology for emerging areas in large-area electronic systems.
- **Integrated Circuit Design:** Analog/mixed-signal, digital, and RF integrated circuit design focusing on biomedical electronics, cryogenic electronic interfaces, mm-wave transceivers, terahertz circuits for communications and sensing, processors for deep neural networks, or other emerging areas.

For exceptional candidates, an appointment at the rank of Associate or Professor will be considered.

The ECE department is home to the Giga-to-Nanoelectronics Laboratory ([Home | Giga-to-Nanoelectronics Centre | University of Waterloo \(uwaterloo.ca\)](#)), facilitating interdisciplinary research that spans nano-materials processing to large-area electronics development and their commercial applications. In addition to these academic and industrial research programs, the laboratory provides the capability to develop and prototype novel emerging technologies for integrated circuit applications. ECE is also an active partner in the Quantum-Nano Fabrication and Characterization Facility ([Home | Quantum-Nano Fabrication and Characterization facility | University of Waterloo \(uwaterloo.ca\)](#)), a core research facility supporting the development of quantum materials, devices, and integrated circuits within the Waterloo campus.

Applicants should have a doctoral degree in Electrical Engineering, Engineering Physics, or a closely related discipline. Candidates must demonstrate a strong commitment to research, teaching (graduate and undergraduate courses), and service. Based on accomplishments, experience, and qualifications of the successful candidate, annual salary will typically range from \$125,000.00 to \$175,000.00. The successful candidate will be required to have an engineering license for practice in Canada or to apply for an engineering license or limited engineering license within five years.

Interested applicants should send a curriculum vita, a statement of research and teaching interests, and the names of at least three references to the Faculty Search Coordinator via the online system at <https://ecefes.uwaterloo.ca/OFAS/index.php>. Applications **submitted by December 31, 2021**, will be accepted for full consideration, with an anticipated start date of September 1, 2022.

The department currently is home to more than 90 faculty members, making it one of the largest ECE departments in Canada. The graduate programs of the department attract outstanding Canadian and international applicants, with an enrollment of more than 700 graduate students. The graduate research in ECE covers 14 technical areas with collaborative graduate programs in Nanotechnology and Quantum Information. The undergraduate programs in Computer Engineering, Electrical Engineering, Software Engineering (offered jointly with the David R. Cheriton School of Computer Science), Mechatronics

Engineering (joint with the Departments of Mechanical & Mechatronics Engineering and Systems Design Engineering), and Nanotechnology Engineering (in conjunction with the Departments of Chemistry and Chemical Engineering) attract and enroll top students from across North America.

The University of Waterloo campus encompasses an exciting research and teaching environment. Researchers benefit from the very generous intellectual property policy of the University, which vests the rights with the inventor. With a strategic commitment focused on technology innovation and entrepreneurial learning, the university has been named "Best Overall" by reputation in Canada with the Faculty of Engineering ranked among the top 50 engineering schools worldwide. Located in a vibrant two-university community within the Region of Waterloo (population of 600,000) in southwestern Ontario, the campus is home to the world's largest post-secondary co-operative education program. The campus is within easy driving distance to the city of Toronto, where researchers benefit from close connections with the many high-technology companies in the Waterloo and greater Toronto area. The region is also close to many recreational vicinities offered by the Great Lakes and Provincial Parks.

The University of Waterloo acknowledges that much of our work takes place on the traditional territory of the Neutral, Anishinaabeg and Haudenosaunee peoples. Our main campus is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River. Our active work toward reconciliation takes place across our campuses through research, learning, teaching, and community building, and is centralized within our Indigenous Initiatives Office (<https://uwaterloo.ca/human-rights-equity-inclusion/indigenousinitiatives>).

The University values the diverse and intersectional identities of its students, faculty, and staff. The University regards equity and diversity as an integral part of academic excellence and is committed to accessibility for all employees. The University of Waterloo seeks applicants who embrace our values of equity, anti-racism and inclusion. As such, we encourage applications from candidates who have been historically disadvantaged and marginalized, including applicants who identify as Indigenous peoples (e.g., First Nations, Métis, Inuit/Inuk), Black, racialized, people with disabilities, women and/or 2SLGBTQ+.

The University of Waterloo is committed to accessibility for persons with disabilities. If you have any application, interview or workplace accommodation requests, or if you have any questions regarding the position, the application process, assessment process, or eligibility, please contact the recruitment committee via Brenda McQuarrie at bmcquarr@uwaterloo.ca.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

Three reasons to apply: <https://uwaterloo.ca/faculty-association/why-waterloo>