

Full-Time Research Assistant – Microelectronics and Integrated Circuit Design

Electrical and Computer Engineering, Concordia University, Montréal, QC

Note: Candidates must be legally authorized to work in Canada for the duration of contract at the time of application.

Concordia University is seeking a full-time Research Assistant to support a collaborative research program in microelectronics and integrated circuit design, in partnership with ÉTS and an industrial partner. The Research Assistant will report directly to Dr. Glenn Cowan and will help guide graduate students, develop research directions, support integrated-circuit and PCB design activities, and assist with laboratory testing and equipment organization. The ideal candidate will have a graduate degree in electrical engineering, or a related field, with strong practical experience in integrated circuit design, industrial electronics circuits and systems, PCB design, and laboratory validation.

Key Responsibilities

- Conduct literature reviews to identify research gaps and help pitch research directions for new graduate students.
- Help students develop research ideas that address the industrial partner's needs while contributing to publishable academic research.
- Hold regular meetings with graduate students to review progress, provide technical guidance, and help resolve design challenges.
- Hold weekly meetings with the PI and other academic co-supervisors to report student progress, discuss technical issues, and investigate new research ideas.
- Provide technical guidance and occasional hands-on support to graduate students throughout the IC design process, including system-level architecture, schematic design, simulation, layout, and verification.
- Assist students with PCB design, board-level testing, and development of test plans for validating fabricated chips or discrete circuits.
- Support physical testing using laboratory equipment such as oscilloscopes, signal generators, spectrum analyzers, power supplies, etc.
- Identify suitable laboratory equipment when needed, including researching appropriate models, specifications, and prices, and presenting recommendations for approval.
- Help organize and equip the research laboratory, including coordinating calibration or servicing of lab equipment when required.

Qualifications

- Graduate degree in electrical engineering, or a closely related field.
- Strong background in integrated circuit design, from system-level concept to schematic design, layout, simulation, and verification.
- Experience with industrial electronics circuits and systems.
- Hands-on experience using Cadence design tools.
- Experience with PCB design software, such as KiCad, Altium, OrCAD, or similar tools.
- Experience with chip/PCB testing, and laboratory measurement equipment.
- Ability to read and synthesize academic literature and translate research gaps into practical project ideas.
- Strong communication, organization, and mentoring skills.
- Ability to work independently while coordinating with graduate students, academic collaborators, and an industrial partner.

Position Details

Position type: Full-time (35 hours/week)
Location: Concordia University, Montréal, Québec
Supervisor: Dr. Glenn Cowan
Collaborators: ÉTS and industrial partner
Posting Period: May 4th to May 20th, 2026

Anticipated start and end date: June 22nd, 2026, to June 21st, 2027, with the possibility of renewal.
There is a possibility that two research assistant positions will be available.

Salary: In line with CARE collective agreement: \$27.03 to \$33/h

Benefits: Health and pension benefits are in accordance with the [CARE collective agreement](#).

Application Instructions

Applicants should submit a CV/resume and a brief cover letter describing their experience in microelectronics, IC design, PCB design, and laboratory testing. **Please apply by May 21st, 2026.** Candidates must be legally authorized to work in Canada for the duration of contract at the time of application.

Applications should be sent to: glenn.cowan@concordia.ca

Territorial Acknowledgement

Concordia University is located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which we gather today. Tiohtià:ke/Montreal is historically known as a gathering place for many First Nations. Today, it is home to a diverse population of Indigenous and other peoples. We respect the continued connections with the past, present and future in our ongoing relationships with Indigenous and other peoples within the Montreal community.

Employment Equity

Concordia University is strongly committed to employment equity within its community, and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candidates, including women, members of visible minorities, Indigenous persons, members of sexual minorities, persons with disabilities, and others who may contribute to diversification; candidates are invited to self-identify in their applications. As part of your application, you will be asked to complete a diversity survey. This information is voluntary and any information collected for this purpose is confidential and cannot be accessed by search committees or human resources employees. Results will be aggregated and used to help Concordia achieve its goal to see all members of our community not only reflected, but welcomed, included and supported in their efforts to contribute to all areas of university life.

Accessibility

Concordia desires to increase diversity among its community members and we strive to make our recruitment processes as accessible as possible and provide accommodations as required for applicants. | |