The Department of Electrical and Computer Engineering in the Faculty of Engineering and Applied Science at Queen’s University requests applications from suitably qualified candidates interested in teaching the following undergraduate course in the 2021-22 session.

ELEC-274: Computer Architecture  
Winter Term Course: January 1, 2022 – April 30, 2022

**Course Description**

This course provides an introduction to basic computer structure, instruction set architecture, assembly-language programming, input/output considerations, processor design based on digital logic, and memory technology and memory system design principles. The primary intent is to provide a foundation for subsequent courses on hardware/software interfacing for microprocessor-based systems, computer system architecture, and digital systems engineering. A secondary intent is to provide an appreciation of the low-level representation of software compiled from high-level languages into machine instructions. The practical aspects of the course are illustrated with the 32-bit Altera Nios II instruction set architecture and soft processor for implementation in field-programmable logic chips, but the principles that are conveyed using this example are largely applicable to any instruction set architecture and processor implementation. This course builds on and supplements knowledge from other courses on digital logic, circuits and electronics, and software/programming.

**Credit Breakdown**  
Lecture: 3  
Lab: 0.5  
Tutorial: 0.5

**Academic Unit Breakdown**

Mathematics 0  
Natural Sciences 0  
Complementary Studies 0  
Engineering Science 26  
Engineering Design 22

Anticipated course enrolment: 160

**Qualifications:**

Minimum of a M.A.Sc. Degree in Engineering or a related field, OR a B.A.Sc. Degree in Engineering with extensive practical experience in engineering communications. Registered as a Professional Engineer (or an Engineer in Training) in the Province of Ontario. Previous teaching experience at the University level will be preferred. Candidates should have excellent communication and presentation skills. Preference will be given to candidates who are registered as professional engineers in the province of Ontario.
Course Syllabus can be found at: https://www.ece.queensu.ca/undergraduate/courses/elec-274.html

**Teaching requirement:**

The above advertised course will be taught on campus. Winter term classes begin on January 10, 2022.

Queen’s University is committed to employment equity and diversity in the workplace, and it 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/Aboriginal people, women, persons with disabilities, and 2SLGBTQ+ persons. All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority. Teaching Fellows at Queen's University are governed by a collective agreement between Public Service Alliance of Canada (PSAC), and Queen's University.

Link: http://www.queensu.ca/humanresources/employees/unions.html

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 Mary Gillespie mary.gillespie@queensu.ca.

The Queen’s University Policy Regarding Mandatory Vaccination Requirements for In-person University Activities requires **ALL** Community Members, including employees, to be Fully Vaccinated against COVID-19 prior to participating in any In-person University Activities. This is a condition of employment for all employees who are required to attend University Property to perform their employment responsibilities. Individuals who cannot be vaccinated due to **substantiated grounds** (medical and other protected grounds under the Ontario Human Rights Code) **may ask the University to validate the exemption** and request an accommodation for these rare circumstances. If approved, they will be subject to additional health and safety measures.

To comply with Federal laws, the University is obliged to gather statistical information about how many applicants for each job vacancy are Canadian citizens/permanent residents of Canada. Applicants need not identify their country of origin or citizenship; however, all applications must include one of the following statements: I am a Canadian citizen/permanent resident of Canada; OR I am not a Canadian citizen/permanent resident of Canada. Applications that do not include this information will be deemed incomplete.

Applications should include a complete and current curriculum vitae, a statement of teaching experience, the names and contact details of two referees who may be contacted, and any relevant other materials the candidate wishes to submit for consideration. Applications can be submitted to the ECE Appointments Committee at the address below, or by email to Mary Gillespie mary.gillespie@queensu.ca.

Applications should be received no later than November 12, 2021.

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Electrical and Computer Engineering Appointments Committee
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