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 2019-20 session.

**Qualifications:**
Minimum of an M.A.Sc. Degree (or equivalent industry design experience) in Electrical & Computer Engineering or a related field, expertise in the field relevant to the course, and appropriate teaching experience. Previous educational background and/or experience must be suited to teaching the course described below. Candidates must have excellent communication and presentation skills, as well as be capable of working as a member of a teaching team. Registration as a Professional Engineer, or eligibility to acquire registration in Canada, is an essential qualification. Prior teaching experience in project based engineering courses and lecture-based engineering courses would be a strong asset. Preference will be given to candidates who are registered as professional engineers in the province of Ontario.

**Teaching requirement:**
**Winter Term Course: 1 January 2020 – 30 April 2020**

**ELEC-274 – Computer Architecture,** Anticipated course enrolment: 150

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.

**PREREQUISITE(S):** APSC 143, ELEC 271 or MTHE 217 (MATH 217) or permission of instruction
**EXCLUSION(S):** CISC 221

**Definitions:**
Course Syllabus can be found at:
https://www.ece.queensu.ca/undergraduate/courses/elec-274.html

The above advertised course will be taught on campus. The successful applicant will have 100 percent responsibility for the course.

Queens University is committed to employment equity and diversity in the workplace and welcomes applications from women, visible minorities, aboriginal people, persons with disabilities, and persons of any sexual orientation or gender identity. 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), http://www.queensu.ca/humanresources/employees/unions.html and Queen’s University.
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.

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 e-mail to Mary Gillespie, mary.gillespie@queensu.ca. Applications should arrive no later than 30 October 2019.

Electrical and Computer Engineering Appointments Committee  
c/o Mary Gillespie, Departmental Assistant  
Department of Electrical and Computer Engineering  
Walter Light Hall, Room 416  
Queen’s University  
Tel. 613 533-6000  
ext.75344  
Fax. 613 533-6615