The Department of Electrical and Computer Engineering at Queen’s University requests applications from suitable qualified candidates interested in teaching the following undergraduate course in the 2019-20 academic session.

Winter Term Course: January 1, 2020 – April 30, 2020

ELEC-274 – Computer Architecture                             W 3-0.5-0.5                4
Anticipated course enrolment: 150

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.

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

Qualifications:
Minimum of a M.A.Sc. Degree in Engineering or a related field, or a BASc. 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: [www.ece.queensu.ca/undergraduate/courses/elec-274.html](http://www.ece.queensu.ca/undergraduate/courses/elec-274.html)

The above advertised course will be taught on campus. Winter term classes begin 06 January 2020.

Queen’s 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. Academic staff at Queen’s University is governed by a collective agreement between QUFA, QUFA 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 email to Mary Gillespie at mary.gillespie@queensu.ca. Applications should be received no later than October 30, 2019.

Electrical and Computer Engineering Appointments Committee
c/o Mary Gillespie, Administrative Assistant
Department of Electrical and Computer Engineering
Walter Light Hall, Room 416
19 Union St.
Kingston, ON
K7L 3N6