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 2018-19 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.

**Teaching requirement:**

Fall Term Course: September 1, 2018 – December 31, 2018

Anticipated course enrolment: 30

**Course Description**

**ELEC 461 – Digital Communications**

This course deals with the fundamentals and the basic techniques used in modern communication systems particularly in digital communications, the foundations of the Physical (PHY) layer of telecom systems, information theory, and source coding. A background in calculus, linear algebra, basic electronic circuits, linear system theory (ELEC 323 and ELEC 324), and probability and random variables (e.g. ELEC 326) is assumed. The focus of this course is not on the device or circuit structure, but rather on the system. ELEC 461 is inevitably mathematically involved, dealing with the representation of signals and noise, and the performance analysis and design of digital communication systems for data transfer and storage. (0/0/0/51/0)

**Definitions:**

http://my.ece.queensu.ca/undergraduate/courses/elec-461.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 June 15, 2018.

Electrical and Computer Engineering Appointments Committee
c/o Mary Gillespie, Administrative 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