Posting Date: 20 September 2018
Closing Date: 12 October 2018

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.Sc. (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. Prior teaching experience in project based engineering courses and lecture-based engineering courses would be a strong asset.

**Teaching requirement:**

Winter Term Course: January 1, 2019 – April 30, 2019

Anticipated course enrolment: 100

**Course Description**

ELEC 374  **Digital Systems Engineering**  W 3-1-.25  4.25

High-performance logic design for arithmetic circuits; memory system designs based on static and dynamic RAMs; computer bus protocols and standard I/O interfaces; mass storage devices; hardware description languages (VHDL, Verilog); fault testing, design for testability, built-in self-test, memory testing, and boundary-scan architectures; asynchronous sequential circuit design; introduction to GPU architectures and GPU computing. The course is supplemented by a CPU design project that allows students to become proficient with Field Programmable Gate Array (FPGA) devices and associated CAD tools, as well as with GPU computing through nVidia CUDA or OpenCL languages. (0/0/0/28/23)

PREREQUISITE(S): ELEC 252, ELEC 271, ELEC 274 or permission of the instructor

Course summary can be found at: [http://www.ece.queensu.ca/Current-Students/Undergraduate/Undergraduate-Courses/LandingPages/ELEC-374/ELEC-374-CourseSummary.html](http://www.ece.queensu.ca/Current-Students/Undergraduate/Undergraduate-Courses/LandingPages/ELEC-374/ELEC-374-CourseSummary.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.

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 12 October 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