

The Department of Electronics is seeking qualified contract instructors for the following courses. **To satisfy program accreditation requirements instructors for all undergraduate courses must have current P.Eng. status in Canada.**

## Summer Term 2018

For summer term courses applications will be accepted until March 1, 2018.

### **ELEC 2501 [0.5 credit]**

#### **Circuits and Signals**

Properties of signals. Basic circuit elements: voltage and current sources. Kirchhoff's laws, linearity, superposition. Thevenin and Norton's theorems. Circuit simplification. AC steady-state analysis: impedance, admittance, phasors, frequency response. Transient response of RL and RC circuits: form of response, initial and final conditions. RLC circuits: resonance.

Precludes additional credit for [PLT 2005](#).

Prerequisite(s): [MATH 1005](#) and ([PHYS 1004](#) or [PHYS 1002](#)).

Lectures three hours a week, laboratory and problem analysis three hours a week.

For accreditation purposes, eligible instructors must have P.Eng. status in Canada.

### **ELEC 2507 [0.5 credit]**

#### **Electronics I**

Qualitative semiconductor physics, leading to the diode equation. Diode applications. Operational amplifiers and their application in feedback configurations including active filters. Introduction to bipolar transistors and MOSFETs, analysis of biasing circuits. Transistor applications including small signal amplifiers.

Precludes additional credit for [PLT 2006](#).

Prerequisite(s): [ELEC 2501](#).

Lectures three hours a week, laboratory and problem analysis three hours a week.

For accreditation purposes, eligible instructors must have P.Eng. status in Canada.

*\* A note to all applicants: As per Articles 16.3 and 16.4 in the CUPE 4600-2 Collective Agreement, the posted vacancies listed above are first offered to applicants meeting the incumbency criterion. A link to the current CUPE 4600-2 Collective Agreement can be found at the Employment Agreements webpage on the Carleton University Human Resources website <https://carleton.ca/hr/labour-relations/academic-staff-agreements/#sect3> and the CUPE 4600-2 website <http://4600.cupe.ca/>.*