



**Sessional Lecturer posting for CUPE 4163 (Component 3)**  
**Department of Electrical and Computer Engineering**  
**Faculty of Engineering and Computer Science**

**ECE 403 / ECE 503 Optimization for Machine Learning**

Term of Appointment from: 1 September 2023 to 31 December 2023

The Department of Electrical and Computer Engineering is seeking a qualified individual to teach **ECE 403 / ECE 503 Optimization for Machine Learning** for the Fall 2023 (September – December) academic term. The calendar description of the course can be found below:

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**ECE403 - Optimization for Machine Learning**

The steepest descent, Newton, conjugate, and quasi-Newton algorithms for unconstrained optimization. Inexact line search techniques. Application of optimization methods to classification, logistic regression, and support vector machines for signal processing and machine intelligence involving audio, image, video, and other types of data. Introduction to constrained optimization.

**Units 1.5      Hours: lecture-lab-tutorial 3-1.5-0      Formerly ELEC 403**

**Note(s)**

- Credit will be granted for only one of ECE 403, ECE 503, ELEC 403, ELEC 503.
- May be offered as a joint undergraduate and graduate class.

**Prerequisites**

- Complete all of:
  - [MATH200](#) - Calculus III (1.5)

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**ECE503 - Optimization for Machine Learning**

The steepest-descent, Newton, conjugate, and quasi-Newton algorithms for unconstrained optimization. Inexact line-search techniques. Application of optimization methods to classification, logistic regression, and support vector machines for signal processing and machine intelligence involving audio, image, video and other types of data. Introduction to constrained optimization. Students are required to complete a project.

**Units 1.5      Formerly ELEC 503**

**Note(s)**

- Credit will be granted for only one of ECE 503, ECE 403, ELEC 403, ELEC 503.
- May be offered as a joint undergraduate and graduate class.

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**REQUIRED QUALIFICATIONS AND EXPERIENCE**

- The successful individual will have a Ph.D. degree, or be enrolled in a Ph.D. degree and must have demonstrated knowledge or experience with the subject matter.
- Prior teaching experience at a university level is an asset.
- Salary is commensurate with the qualifications and follows the Sessional Lecturer Salary Grid included in the agreement between the University of Victoria and CUPE Local 4163 (Component 3).
- **IF YOU ARE A GRADUATE STUDENT APPLYING FOR THIS POSITION, YOUR APPLICATION MUST INCLUDE A LETTER FROM YOUR SUPERVISOR(S) INDICATING HIS/HER/THEIR AGREEMENT WITH YOUR ACCEPTING THIS POSITION SHOULD IT BE OFFERED TO YOU.**

The availability of this position is subject to funding and enrollment criteria. The University of Victoria reserves the right to fill additional teaching assignments from the pool of applicants for this posting.

The University of Victoria is an equity employer and encourages applications from women, persons with disabilities, visible minorities, and aboriginal persons.

**TO APPLY:** Please submit an expression of interest together with a recent CV via email to [eceasst@uvic.ca](mailto:eceasst@uvic.ca) Attention: Chair, Department of Electrical and Computer Engineering by: **19 July 2023 at 10:00am.**