

2024 SUMMER SESSIONAL/OVERLOAD APPOINTMENTS

In accordance with section 54:07 of the 2021-2025 Collective Agreement the Windsor University Faculty Association (WUFA), Department of Electrical and Computer Engineering invites applications from qualified individuals interested in teaching the following course(s), subject to final budgetary approval, course enrollment and appointment of new full-time faculty.

Applicants are required to review University of Windsor Senate Bylaws 54 & 55 (Academic Evaluation Procedures) and Article 5:23 to 5:25 of the Collective Agreement with WUFA. Full documentation is available online by visiting the University of Windsor website (www.uwindsor.ca).

ELEC 3240-01/51: Control Systems I (3 lecture, 3 laboratory/tutorial hours a week.)

ELEC 4480-01/51: Digital Computer Architecture (3 lecture, 3 laboratory/tutorial hours a week.)

ELEC 4600-01/51 (Cross-listed with ELEC 8900-51): Power Systems II (3 Lecture and 2 Lab/ Tutorial hours per week)

GENG-1202: Introductory Electrical and Computer Engineering (3 Lecture and 3 Lab/Tutorial hours per week)

GENG-8010: Engineering Mathematics (3 Lecture hours per week)

GENG-8030 - Computational Methods & Modeling for Engineering Applications (3 Lecture hours per week)

ELEC-8900-56: Special Topics: Automotive Mechatronics (3 Lecture hours per week)

Overview of automotive powertrain mechatronics; sensors and actuators embedded in advanced IC engine powertrain systems; advanced spark ignition engine operation and electronic control; advanced compression ignition engine operation and electronic control; E-motor operation and control; energy storage and charging systems.

ELEC-8900-82: Special Topics: Energy Conversion and Management in Electric Vehicles (3 Lecture hours per week)

This course will cover various energy conversion modes such as AC/DC, DC/DC, AC/AC, Electro-Mechanical, Electro-Thermal, etc. that take place in an electric vehicle. The course will focus more on state-of-the-art electric vehicle power electronics, energy storage technologies and their controls. It will also focus on operation, modeling and design of power electronic converters, control methods for e-drives, energy management strategies including battery packs, sensors, passive components, etc. It will explain challenges towards efficiency and reliability improvement of such systems, practical solutions and sample hardware implementations in electric vehicles. The knowledge can also be applied to various industrial applications where such energy conversion takes place.

Applicants who wish to be considered for the privilege of Employment Equity need to self-identify themself as members of the Targeted groups. With the exception of exemptions identified under Section 54:08 (a) of the WUFA Collective Agreement, all applicants are required to submit official teaching evaluations (SET scores) or equivalent of all courses they have taught along with an updated CV. Only applicants with a background in Electrical & Computer Engineering or related fields will be considered. Applicants who have not taught previously in the Department will be asked to complete an Engineering Academic Application for Employment and will be required to submit three (3) letters of reference and teaching evaluations to:

Dr. Behnam Shahrrava, **Department Head** Department of Electrical & Computer Engineering Faculty of Engineering, University of Windsor, Windsor, Ontario, N9B 3P4 EMAIL: ece@uwindsor.ca

> Closing date for applications: Monday, March 18th, 2024 at 4:00 pm Please note that only successful candidates will be contacted.

The University of Windsor is committed to employment equity and welcomes applications from Aboriginal Peoples, persons with disabilities and members of visible minorities. Applications from women are particularly encouraged. Applicants who wish to be considered for the privilege of Employment Equity need to self-identify themselves as a member of the targeted groups. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

For additional information, please contact the Department of Electrical and Computer Engineering (ece@uwindsor.ca).

Distribution:

- Dr. B. Van Heyst, Dean, Faculty of Engineering
- Dr. S. Das, Associate Dean, Research & Grad Studies, Engineering
- Dr. A. Edrisy, Associate Dean Academic, Engineering
- Dr. P. Frise, Associate Dean, Professional Programs, Engineering Dr. J. Johrendt, Associate Dean, Student Affairs-WINONE,
- Dr. B. Minaker, Head, MAME
- Dr. E. Tam, Head, Civil and Environmental Engineering

- Ms. J. Asuncion, Manager, Finance and Administration, Engineering
- Ms. M. Hatt, Administrative Assistant, Engineering Ms. D. Gabriel, Secretary to the Associate Dean, Research & Grad Studies
- Ms. D. Lougheed, Secretary to the Assolate Dean, Academic Engineering Ms. B. Murdock, Secretary to the Associate Dean, Professional Programs Engineering
- Ms. J. Burke, Secretary to the Head, MAME
- Ms. A. Bartlett, Secretary to the Head, CEE Ms. L. Chandler, Manager, Student Success and Academics

Windsor University Faculty Association (WUFA)