

Department of Electrical and Computer Engineering

401 Sunset Avenue, Windsor Ontario, Canada N9B 3P4 T 519 253 3000 (2570) F 519 971 3695 ece@uwindsor.ca

2024 WINTER 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-2170-01/51/52: Digital Logic Design I

ELEC-4500-01/51: Power Systems I (C/L ELEC 8900-52)

ELEC-4570-01/51: Fundamentals of Digital Signal Processing

GENG-8030 - Computational Methods & Modeling for Engineering Applications

ELEC 8900-78: Special Topics: Modeling and Control of AC Machines

Accurate modeling and control of AC machines play a pivotal role in supporting optimal performance within electrified transportation and meeting the growing demand for sustainable and efficient transportation solutions. With this in mind, this course is specifically tailored for graduate students, aiming to provide a comprehensive grasp of dynamic modeling and control principles pertaining to AC machines, namely permanent magnet synchronous machines (PMSMs) and induction machines (IMs). Throughout the duration of the course, students will be exposed to diverse modeling techniques, encompassing three-phase and rotating reference frame modeling approaches, which enable a precise representation of AC machines. Additionally, students will have the opportunity to apply and expand their acquired knowledge by developing field-oriented control (FOC) strategies for PMSM drives, as well as implementing indirect fieldoriented control (IFOC) techniques for IM drives. It is worth highlighting that the modeling and control techniques employed throughout the course are all implemented using MATLAB/Simulink.

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 November 6th, 2023 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

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

Distribution:

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