

## Summer Job Opportunity for MREN 410 Mechatronics & Robotics Engineering Course Development

On behalf of the new Mechatronics and Robotics Engineering (MRE) program, the Faculty of Engineering and Applied Science will be hiring one student to assist in the development and testing of laboratories for a new course: **MREN 410 Autonomous Machines and Intelligent Systems**, which will be offered for the first time in Winter 2025. The objective of the course is to provide students with a working knowledge of methods for design and analysis of robotic and intelligent machines that can think, learn and act in uncertain conditions. Topics include basic principles and methods of machine vision, machine learning and identification, decision-making, and their applications in the design of an autonomous system.

Successful candidate will be:

- An undergraduate student who has successfully completed 3<sup>rd</sup> year, or a full-time graduate student, in the ECE or MME program or related engineering program (Please note if you work on developing this course, you will not be able to take the course)
- A recent graduate of an ECE or MME, or related engineering program

Successful candidates will ideally have:

- Sound understanding of core concepts in signals and systems
- Experience in microprocessor interfacing and embedded systems
- Proven ability to work independently, and
- Initiative and creativity

Experience in the following areas would be considered an asset

- have taken ELEC 475 (Computer Vision with Deep Learning)

If you are interested, please submit a cover letter, unofficial transcript, and your resume by **Sunday March 3<sup>rd</sup> 11:59pm** to Jenny Cruz ([j.cruz@queensu.ca](mailto:j.cruz@queensu.ca)). For undergraduate students, the position will be for 16 weeks of full-time work (normally May to August 2024) at \$17/hour (plus 4% in lieu of vacation). For graduate students, the position will be for 16 weeks, part-time, with a maximum of 10 hours per week of work time. Graduate students must have permission of their supervisor to take on this position.



You must be eligible to work in Canada. For more information on the MRE program, please visit the website: <https://engineering.queensu.ca/programs/undergraduate/mre/>. If you have any questions, please feel free to contact Prof. Wang ([xian.wang@queensu.ca](mailto:xian.wang@queensu.ca)) who will be the supervisor. We appreciate all applications, but only those selected for an interview will be contacted.