SMITH ENGINEERING
Queen's University

Electrical and
Computer Engineering

DEPARTMENT ELECTRICAL & COMPUTER ENGINEERING
SMITH ENGINEERING
Teaching Assistant Position
Academic Year 2024-2025

Project Development for a New Course on Safety-Critical Software Engineering

Posting Date: **September 30, 2024**
Closing Date: **October 7, 2024**

Term: Fall 2024
Employment Type: Teaching Assistantship
Pay Rate: $44.02 / hour
Total Hours: 100

The Department of Electrical and Computer Engineering in the Faculty of Engineering and Applied Science at Queen's University will be hiring one student this Fall, to assist in the development of resources for a currently running course in the Electrical & Computer Engineering (ECE) department in the 2024-2025 session.

Description:
This position is for a student worker to assist in the development of resources for a currently running course in the Electrical & Computer Engineering (ECE) department.

The course is designed around a group project that students will implement over the course of the semester. As such, there is a need to develop a suitable project and work through all of the tasks that students will do as part of their learning. The early phases of the project have been designed and the content is being delivered to students, but the later phases of the project are in various stages of development and there is a need for some help to get them over the finish line before the students catch up.

The applicant will work with the course instructor to develop later stages of the project, focusing primarily on embedded development using FreeRTOS on Arduino platforms. The application will produce documents that students can use in labs to prepare for later project phases and will build some of the test infrastructure that students will use near the end of the course to help verify their designs.

This is a unique opportunity for a motivated student with strong software skills who is interested in Safety-Critical Embedded Systems and education.

Qualifications:

- Experience with embedded programming greatly preferred
- Demonstrable proficiency in C programming
- Completion of a 2nd year undergraduate programming course such as ELEC 279 or equivalent with at least an 80% average
- Experience with embedded programming, such as Arduino
- A background in formal logic is desirable but not required

How to Apply:
Interested candidates should submit the following documents in PDF format to Dr. Sean Kauffman at sean.k@queensu.ca.

Each document's name should include the document type followed by the applicant's name. For instance, the CV for an applicant named Sam Doe should be labeled as: CV_SamDoe; the email's subject line should read "Application for Course Development Support: Sam Doe."

- Updated CV
- 1 or 2 paragraphs detailing relevant experience
- Unofficial academic transcripts from current degree program (and/or previous degrees, if relevant)

This is a Teaching Assistant position, working a maximum of 100 hours during the period of October through December. The pay rate is $41.14/hour + 7 % vacation pay and benefits.

Only shortlisted candidates will be contacted for interviews.
Applications should be received no later than October 7, 2024.

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