### **Dalhousie University Faculty of Agriculture**

### AGRI5710 and AGRI5705: Graduate Module Course

## **Module Offering Request**

Please complete and send in electronic form to Dian Patterson, Course Coordinator, Haley Institute, <a href="mailto:dian.patterson@dal.ca">dian.patterson@dal.ca</a>
This form must be submitted by the Instructor of the module and approved before the module begins. The Course Outline for AGRI5710/5705 (available at Faculty of Agriculture Graduate Program website, or from the Course Coordinator) provides further details on the course structure.

# **Application of C# Programming for Agricultural Automation**

### **Instructor:**

**Dr. Young Ki Chang**, Assistant Professor and Biosystems Automation Research Chair Engineering Department, Faculty of Agriculture, Dalhousie University

**Time**: Summer/Fall Term 2017

**Delivery:** This module will be comprised of 6 weeks of 2 hour lectures/labs dealing with basics of Programming in C#:

## **Background**

The .NET frame will be introduced, their application discussed, and hands-on programming sessions held. Particular topics include applications of programming in Visual C# in GUI development, interfacing and control of devices, image & data acquisition, and real-time process control. The module ends with project work and report submission by each student, aiming at solving a problem related to his/her thesis.

**Evaluation:** Assessment of this module will be in lab coding, the form of weekly assignments and a single report to be submitted at the end of module.

- o Laboratory exercise coding (20 %);
- Weekly assignment (30 %); and
- o Individual project work (includes presentation and report) (50 %).

## **Prerequisites:**

Enrollment in graduate program