ORIGINAL COURSE IMPLEMENTATION DATE: September 2015

REVISED COURSE IMPLEMENTATION DATE:

COURSE TO BE REVIEWED: (six years after UEC approval) December 2020

Course outline form version: 11/22/13

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: ELTR 216 **Number of Credits:** 3 Course credit policy (105)

Course Full Title: Automation and Control Systems Project
Course Short Title: Automation Project

Faculty: Faculty of Applied and Technical Studies

Department (or program if no department): Agriculture

Calendar Description:

Apply knowledge gained in this program to design, construct, and demonstrate a fully functional automated system and apply it to an agriculture application model. Work is performed in groups, encouraging team work and collaboration within their class and other faculties/trades.

Prerequisites (or NONE): Admission to the Automation and Robotics Technician diploma program or departmental approval.

Corequisites (if applicable, or NONE): NONE

Pre/corequisites (if applicable, or NONE): NONE

Equivalent Courses (cannot be taken for additional credit)

Former course code/number:

Cross-listed with:

Equivalent course(s):

Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.

Transfer Credit

Transfer credit already exists: ☐ Yes ☒ No

Transfer credit requested (OReg to submit to BCCAT):

☐ Yes ☒ No (Note: If yes, fill in transfer credit form)

Resubmit revised outline for articulation: ☐ Yes ☒ No

To find out how this course transfers, see **bctransferguide.ca**.

Total Hours: 60

Typical structure of instructional hours:

Lecture hours	
Seminars/tutorials/workshops	
Laboratory hours	60
Field experience hours	
Experiential (practicum, internship, etc.)	
Online learning activities	
Other contact hours:	
Total	**60**

Special Topics

Will the course be offered with different topics?

☐ Yes ☒ No

If yes,

Different lettered courses may be taken for credit:

☒ No ☐ Yes, repeat(s) ☐ Yes, no limit

Note: The specific topic will be recorded when offered.

Maximum enrolment (for information only): 20

Expected frequency of course offerings (every semester, annually, etc.): Annually

Department / Program Head or Director:	Rolf Arnold	**Date approved:**	September 2014
Campus-Wide Consultation (CWC)		**Date of posting:**	December 12, 2014
Faculty Council approval		**Date approved:**	September 2014
Dean/Associate VP:	John English	**Date approved:**	September 2014
Undergraduate Education Committee (UEC) approval		**Date of meeting:**	December 12, 2014

Learning Outcomes

Upon successful completion of this course, students will be able to:

a. Apply all acquired skills to design, construct and demonstrate a fully automated system and apply it to an agriculture application model.
b. work in teams.

Prior Learning Assessment and Recognition (PLAR)

☒ Yes ☐ No, PLAR cannot be awarded for this course because

Typical Instructional Methods (guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion)

Lectures and Lab work with occasional guest lecture

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials (if more space is required, download supplemental Texts and Resource Materials form)

	Author Surname, Initials	Title (article, book, journal, etc.)	Current Edition	Publisher	Year Published
1.		No text is required for this course	☐		
2.			☐		
3.			☐		
4.			☐		
5.			☐		

Required Additional Supplies and Materials (Eg. Software, hardware, tools, specialized clothing)

Typical Evaluation Methods and Weighting

Final exam:	%	Assignments:	25%	Midterm exam:	%	Practicum:	%
Quizzes/tests:	%	Lab work:	25%	Field experience:	50%	Shop work:	%
Other:	%	Other:	%	Other:	%	Total:	100%

Details (if necessary):

Grading system: Letter Grades: ☒ Credit/No Credit: ☐ Labs to be scheduled independent of lecture hours: Yes ☒ No ☐

Typical Course Content and Topics

Specifications for the project will be derived from the specific needs of the agriculture department with its guidance and collaboration with agriculture students.

This is a capstone project.