

Final Assessment Report
Submitted by SUPR-U to SCAPA

Program:	Mechatronics Systems Engineering	
Degrees Offered:	Bachelor of Engineering Science (Mechatronics Systems) Honors Business Administration/B.E.Sc. (M.S.) Juris Doctor/B.E.Sc. (M.S.)	
External Consultants:	Dr. Alex Ramirez-Serrano, Dept. of Mechanical & Manufacturing Eng. Schulich School of Engineering, University of Calgary	Dr. Ridha Ben Mrad, Department of Mechanical and Industrial Engineering University of Toronto
Internal Reviewers:	Joan Finegan , Associate Dean Faculty of Social Science	Paul Scala, Student Faculty of Arts & Humanities
Date of Site Visit:	February 11, 2014	
Evaluation:	Good Quality	

Executive Summary

Mechatronics is a multidisciplinary field that encompasses mechanical engineering, electrical engineering and computer control and interfacing. The program at Western is relatively new, and had its first graduating class of approximately 25 students this past June. All stakeholders interviewed, including students, staff, and faculty, were enthusiastic about the program, an enthusiasm which was shared by the reviewers. The reviewers were impressed with virtually all aspects of the program including the excellent facilities, instructors, technical staff and the quality of the students.

Significant Strengths of Program:

- The program is designed to ensure that graduates are well rounded engineers who are able to work in multidisciplinary teams
- The linkages and infrastructure are in place to support internationalization
- The program attracts the best students, and the demand for the program is high. Students are very satisfied with the program
- The curriculum includes internships, service learning, student teaching, and covers all fundamental areas. Students have opportunities for learning through design and by exploring, practice and experience.
- The program sets a high standard for excellence

Opportunities for improvement & Enhancement:

- Increase the physical size of the lab - Since the report, the Mechatronic's lab has moved to a larger space, essentially doubling its current size.
- Provide a work area for students to work on projects outside of class time. A temporary solution has been implemented but a long-term solution to create a new facility is being considered.
- Offer a mandatory safety course. In fact, the department will implement a new mandatory safety course as of September 2014
- Expand the design projects to include projects not only in the biomedical area but in areas such as automotive, aerospace and high technology. The department has considered this possibility, but notes the biomedical area is an area of particular strength. It is therefore reluctant "to dilute the brand" by focusing on other areas. That said, students are still able to do projects in other fields.
- Provide a speaker series for students and support their participation in international competitions.
- As the program develops, ensure program outcomes are measured using multiple indicators.

Recommendations for implementation:	Responsibility	Resources	Timeline
Increase size of lab	Department		completed
Introduce mandatory safety course	Department		completed
Provide a work area for students outside of class	Department/Faculty		Short-term solution completed, focus is now on a long-term solution