

# Mechatronic Systems Engineering Program Final Assessment Report & Implementation Plan

<b>Faculty / Affiliated University College</b>	Faculty of Engineering
<b>Degrees Offered</b>	B.E.Sc.
<b>Modules Reviewed</b>	Mechatronic Systems Engineering
<b>External Consultants</b>	Dr. Ridha Ben Mrad, Professor, Department of Mechanical and Industrial Engineering, University of Toronto  Dr. Alejandro Ramirez-Serrano, Professor, Department of Mechanical and Manufacturing Engineering, University of Calgary
<b>Internal Reviewer</b>	





- € The Reviewers observed that the Program’s emphasis on biomedical-related technologies and design projects may limit the options for learning in other areas, including some related to very large sectors of the economy. They suggested that the Program expand the options available so that graduating students will be able to more easily integrate into diverse sectors of the economy. The Program commented that, each year, “students are presented with an extensive list of potential project topics suggested by faculty members.” While biomedically-oriented projects have proven popular, “the majority of project topics in a given year are from different areas.”
- € The Reviewers recommended enhanced collaboration between faculty members from Mechanical and Electrical Engineering who participate in the MSE Program in proposing integrated design projects.
- € The Reviewers noted that students expressed a desire for greater instruction in the tools currently being used in industry. While recognizing that the pace at which the world changes precludes training in all tools, the Reviewers suggested that MSE students could receive more information about how the fundamental skills learned at university enable them to address any problems in industry. The Program commented that, while students “may not know how to use a particular tool, they have the background to learn how to use it quickly and effectively.”
- € The Reviewers recommended “that any changes in TA support are done carefully in order to ensure that any negative impact on the course delivery and student experience is negligible and/or there is a better resource allocation of the TA hour to ensure improved course delivery.” The Program believes it can continue to deliver high quality labs and experiential learning components even with the recent reduction in TA hours, although additional hours would be required were the Program to grow.

## Implementation Plan

The Implementation Plan provides a summary of the recommendations that require action and/or follow-up. The Department Chair, in consultation with the Dean of the Faculty will be responsible for monitoring the Implementation Plan. The details of progress made will be presented in the Deans’ Annual Report and filed in the Office of the Vice-Provost (Academic).

Recommendation	Proposed Action and Follow-up	Responsibility	Timeline
1. Review administrative, technical and faculty staffing needs	Program Director to discuss with Department Chairs, Deans and Provost		
2. Expand lab space and/or availability as appropriate for enrolment	Program Director to		