

Final Assessment Report

Submitted by SUPR-G to SCAPA

Program:	Biomedical Engineering (BME) Program
Degrees Offered:	MESc and Ph.D.
Approved Fields:	Biomaterials, Biomechanics, Imaging and Robotics
Date of Site Visit:	December 8 and 9, 2011
Evaluation:	<i>Conditional Approval with report in one year</i>

Summary:

The Biomedical Engineering (BME) Program has been in existence for 10 years and in many ways is a model for interdisciplinary studies and cooperation. The BME Program has successfully grown to approximately 67 students, attracting high-quality candidates to both the MESc and PhD programs with time-to-completion and placements that are consistent with successful BME programs at peer institutions. The BME Program has strong and productive faculty who are generally well-funded and supported with excellent facilities, such as the Biomedical Imaging Centre and the Canadian Surgical Technologies & Advanced Robotics (CSTAR) network. The strength of the program is the excellent research training that is provided to students.

The external reviewers identified opportunities for improvement in the areas of governance and leadership, program education and pedagogy, and standardization and transparency of student funding policies. The issues of governance and leadership relate, in part, to the interdisciplinary nature of the program and will be an ongoing challenge. Securing additional space for a common student area will help create a common student culture. In addition, the external reviewers observed that a limited number of senior faculty (approximately seven) were responsible for supervising students. There is also a need to address administrative resources (e.g., someone to carry out the duties of a Graduate Chair) and undertake a review of course offerings and academic activities. A dedicated position is needed to assume responsibility for implementing recommendations that would develop a strong pedagogical foundation in the BME Program rather than a collection of individual courses. Addressing the issues raised in the external reviewers report can help transform the BME Program to one that provides excellent research training with a strong interdisciplinary education.

Recommendation:	Responsibility
Regular meetings of Steering Committee (SC) to develop a strategic plan for BME – at least three times per year.	Dean of Engineering
Conduct a review of educational and pedagogical status of the BME Program. Articulate clear program outcomes that are consistent with degree level expectations set out by the Quality Council. It is a priority to make recommendations for changes, including refinement of courses, and to implement changes.	BME Program Director and Graduate Chair
Implement structure (possibly through the addition of a Graduate Chair) that ensures responsibility for graduate activities, including courses, theses, comprehensive exams, advisory committees and admissions and report to SC	BME Program Director, Steering Advisory Committee
Creation of student funding policy and increased transparency of this policy, including allocation of teaching assistantships.	BME Program Director
Review of format for comprehensive exams and make appropriate changes.	BME Program Director/Graduate Chair
Secure additional space for BME program.	Dean of Engineering