## **Final Assessment Report**

Submitted by SUPR-G to SCAPA

Program:	Civil and Environmental Engineering	
Degrees Offered:	Master of Engineering Science/Master of Engineering/PhD	
Approved Fields:	Structures and Infrastructure Engineering; Geotechnical and Geo- Environmental Engineering; Environmental and Water Resource Engineering; Wind Engineering	
External Consultants:	Paul Van Geel Carleton University	John Newhook Dalhousie University
Internal Reviewers:	Pam Bishop, Associate Dean Graduate Programs, Faculty of Education	Sarah Hogarth Rossiter, PhD Candidate, Department of Philosophy
Date of Site Visit:	February 6 & 7, 2013	
Evaluation:	Good Quality	

## **Executive Summary:**

The external reviewers acknowledged the high quality of faculty and allied personnel associated with this program. Faculty have strong research agendas, substantial funding and typically supervise 5 thesis-based students. On the basis of research, supervision and publication data, the external reviewers noted that four of the five fields—Structures and Infrastructure Engineering; Geotechnical and Geo-Environmental Engineering; Environmental and Water Resource Engineering; and Wind Engineering—are robust and sustainable. Phasing out of the fifth field, Natural Disaster Mitigation, is recommended.

## **Significant Strengths of Program:**

Thesis-based students are particularly well supported in terms of financial assistance, provision of office space and library resources. As well, students have access to both high quality labs, and innovative program facilities such as Wind Engineering, Energy and Environment Research Institute is (WINDEEE), Insurance Research Lab for Better Homes (IRLBH) and Boundary Layer Wind Tunnel Laboratory (BLWT). Thesis-based students were highly satisfied with the quality of the curriculum, instruction and supervision. Whilst completion times for most PhD students were deemed appropriate, the external reviewers noted that the median time-in-program for thesis-based MESc students could be reduced from 2.3 to 2 years.

## **Opportunities for improvement & Enhancement:**

To further enhance the substantial nature and achievements of the program, the external reviewers identified three key recommendations. The most pressing of the recommendations concerns the vital need to appoint a Graduate Chair (as the position is currently vacant). The second key recommendation pertains to the need by all Faculty to review the design and delivery of the course-based Master of Engineering to ensure that the goals, objectives and anticipated learning outcomes reflect the program's core purposes. Once done, the nature and format of the program needs to be communicated clearly to each cohort of students at the outset of their studies. The third key recommendation relates to communication and a need for students to be provided with more information about both what is expected of them and the disparate resources available to them in the Faculty of Engineering and elsewhere at Western.

In summary, the external reviewers highly praised the quality of the program.

Recommendations for implementation::	Responsibility
Ensure appointment of a Graduate Chair (currently vacant) in a timely	Dean
manner.	Associate Dean
Clarify the purposes, objectives and overall design of the Masters of	Associate Dean
Engineering program.	Graduate Programs
	Committee
Provide students with policies and other information in relation to the	Associate Dean
supervisory relationship; message students electronically and post hard	Graduate Faculty
copies inside the building re mental health supports and services; dispute resolution.	
Assess the viability of providing more technical support personnel.	Associate Dean
	Graduate Chair
Provide specialized training to certify the chief technician so that only he	Associate Dean
can operate the overhead cranes in the lab. Place signage in the lab to	
ensure the lab floor is clear when the crane is to be used and operated.	
Provide additional storage facilities in the structures lab for safe-keeping	Dean
of samples and safe usage of the lab by students and staff.	Associate Dean
Closely monitor progression of students in the thesis based MESc	Associate Dean
program to more consistently achieve timely completion. (normally 2	Graduate Chair
years).	Graduate Programs
	Committee
Phase out the Natural Disaster Mitigation Field.	Dean
	Associate Dean
	Graduate Chair
Provide better remote access to university-supported software; and	Dean
provide more specialized software on MEng study room computers.	Associate Dean