

Civil Modules Reviewed

Internal Reviewer	Tracy Isaacs, Associate Dean (Academic), Arts and Humanities
Date of Site Visit	November 26, 2018
Evaluation	Good Quality
Approval Dates	SUPR-U: March 20, 2019 SCAPA: April 3, 2019 Senate: April 12, 2019

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review process that is made public, all other documents are confidential to the Program/School/Faculty and SUPR-U.

Executive Summary

The site visit took place on November 26, 2018, the same day as all the other site visits for all Engineering programs and coinciding with the Canadian Engineering Accreditation Board (CEAB) site visit. Much of the provided documentation was also the same as what was provided to the CEAB team. As the external reviewers note, this was expedient and understandable, but since the CEAB and the IQAP review have different objectives and purposes, it wasn't ideal from the IQAP perspective. It was sometimes challenging to find simple information needed to speak to IQAP criteria.

The site visit itinerary included meetings with the following:

- < Vice Provost (Academic Programs)
- < Vice Provost (Academic Planning, Policy and Faculty)
- < Department Chair and Undergraduate Chair
- < Acting Dean and Associate Dean (undergraduate studies)
- < Members of the Undergraduate Curriculum Committee
- < Faculty members
- < Librarians and library tour
- < Department Administrative Staff
- < Department Technical Staff
- < Facilities tour
- < Students

The external reviewers' report paints a picture of a well-resourced department with a strong faculty complement, sufficient admin staff and technical staff support, excellent library

- < Fourth Year Capstone Course offered in collaboration with the City of London has been very successful in providing students with experiential learning in practical design projects mentored by professionals in industry.
- < Structural and Environmental Engineering and International Development programs, which are unique in Canadian civil engineering programs
- < Promotion of interdisciplinary initiatives, e.g. students in the International Development programs take courses in Geography and the Centre for Global Studies; students have an option to take a combined degree with Business or with Law.
- < Opportunities for overseas internships for students
- < Percentage of female students (27%) slightly higher than the national average for civil engineering (as reported in 2016 at 25%), and the women report a positive student experience in the program.

Summary of the Reviewers' Key Recommendations and Department/Faculty Responses

Reviewers made the following recommendations:

1. Continued effort will be required to increase enrolment in the environmental option. Introduction of environmental engineering into first year would help recruit students into the environmental engineering option.
2. Concern over reduction in TA support needs to be addressed.
3. Low representation of female faculty members in the Department. A total of three female faculty members, with none in the structural engineering area. Increasing the number of female faculty members will require a continued commitment from Department and Faculty.

Department's response:

1. The department exerts some effort to promote its Environmental Engineering program through outreach to first year students and high school students, and the first year students have exposure in several lectures in 1050. There has been some increase in recent years, and if the 2+2 programs succeed, those international students will be able to join the environmental option in third and fourth year.
2. The TA reduction has been a point of discussion and concern for 2 years. The Department held a half day retreat to address teaching practices that may help deal with the reduction. Discussions to minimize the impact of the TA reduction will continue.
3. The representation of women faculty members in the Department was not addressed in the Departmental or Faculty response.

Other Opportunities for Program Improvement and Enhancement

Reviewers identify the following issues:

1. Students might benefit from more departmental-level advising (at present it is largely done at the Faculty level)
2. Proposed 2+2 requires buy-in from faculty members and more detailed study before it can be considered a viable initiative.

3. Students should be provided learning opportunities in the areas of machine learning and artificial intelligence, as well as climate change, since these are emerging popular areas of interest in the field.
4. Increase the visibility of wind engineering and urban sustaina

Implementation Plan

The Implementation Plan provides a summary of the recommendations that require action and/or follow-up. The Department Chair/Director, in consultation with the Dean of the Faculty/Affiliated University College Principal 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
1. Sustained effort to recruit into Environmental Engineering program	Department to continue recruitment/outreach plan and also possibly target 3 rd and 4 th year international students in 2+2
2. Address impact and plan for managing TA reduction	Concrete plan required; ongoing discussion with colleagues