

Two Year Progress Report

Civil and Environmental Engineering (MSc/PhD)

September 2017; revised October 2019

Background

The Department of Civil and Environmental Engineering offers graduate and undergraduate degrees in Civil Engineering and is one of the largest Civil and Environmental Engineering departments in the country. The last review of the graduate programs was completed in April 2015 by the reviewers Drs. Lye and Yanful and by the internal reviewer Dr. Liston. The report was generally quite positive, with the reviewers stating "Reviewers were of the opinion that the UW CEE graduate program is very strong and comparable to civil engineering programs at other top Canadian universities."

The report identified a number of issues and recommendations. The Department responded to the issues and has been working towards addressing the recommendations by the reviewers as described in the following sections.

Progress on Implementation Plan

Recommendations

1. There should be a clearer written policy in the calendar regarding minimum passing grades in engineering and course failures. The minimum passing grade in a graduate engineering course is not mentioned in the calendar. It is, however, mentioned that an overall average mark of 70% is required for progression.

Status: Complete

Details: The Website of the CEE Department has been significantly improved since the last review; in agreement with the changes in the website of the faculty of engineering. The minimum mark required to satisfy a course requirement has been included in the MENG description, and it will be updated for the other programs in the next set of modifications to the calendar approved by the Department and in the process for approval from the Senate. The website has been updated with the link to the Graduate Calendar for consistency (<https://uwaterloo.ca/graduate-studies-academic-calendar/general-information-and-regulations/grades-and-grading>).

2. CEE should encourage and monitor the participation of CEE students in the new MAsc and PhD Collaborative Water Program. Students should not miss this unique opportunity.

Status: Ongoing

Details: The Department is encouraging the participation of CEE students in the new MASc and PhD Collaborative Water Program in all the graduate studies information sessions. The participation of graduate students in these programs is monitor by the Graduate Coordinator as the information is required for the allocation of scholarships specific for these programs.

3. Inequalities in the quality of graduate student office space should be addressed. The plan to renovate current inadequate and dated offices being used by GEO graduate students is commendable and should be implemented.

Status: In progress

Details: The CEE Department has been working on a significant space renovation plan coordinated by the Chair and the Space Committee. Practically all student offices have been renovated. The Geotechnical engineering (GEO) graduate students have been relocated since the beginning of the Spring 2017 term while the main renovations of the final office space are completed. A \$30,000 renovation of the offices of GEO students are under way. All GEO students have been relocated in comfortable offices in the third floor of E2 while the renovations continue.

4. The 4 FTE faculty complement for the GEO group is the minimum and that UWaterloo should do all it can to increase or at least maintain this number. This should be considered mission critical.

Status: Completed

Details: The CEE Department approved a new position for the Geotechnical group. The DACA Geo made a recommendation, and the selected candidate was hired effective January 2018.

5. More graduate courses in the GEO area should be offered on a regular basis.

Status: Completed

Details: As per the previous recommendation, the new faculty member started in January 2018. Thus, the number of graduate courses will be improved on regular basis. The new faculty member has added a new graduate course.

6. The funding level for international MASc students should be increased so that sufficient funds are available for living expenses after the payment of fees.

Status: In progress

Details: The minimum funding for MASc students have been increased by the University. However, the current funding for international students is still not sufficient to cover living expenses and the tuition fees. The Department is currently discussing alternatives to increase the funding for all graduate students. The GSPA has decided to cut the differential fees for international students. The reactions from the faculty and the department to the new regulations are currently under discussion. The Department has approved the creation of specializations for the MENG program to increase the number of students. A percentage of the

tuition is transferred to the department. Hence, it is expected that the increased enrollment in the MENG program will create additional revenue to improve the graduate program not only by increasing the number of graduate courses offered per year, but also by providing better financial support to Canadians, Permanent Residents and International students in the form of teaching assistantships. The department presented a proposal for the new specializations. However, final approval has been delayed by the new definitions of specializations from GSPA and the adoption of additional restrictions by the Faculty of Engineering. The increase of GRS funding is still in progress at the Faculty level.

7. To encourage conference attendance and participation by graduate students, travel support should be increased. The Department, faculty, Graduate Student Association and the University could share this increase.

Status: In progress

Details: The Graduate Studies Committee is currently recommending to the Department the use of the graduate fund, which is provided by the Faculty and the University, to enhance the graduate experience in the CEE. One of the current proposals to the Department is to use part of the graduate fund to support graduate students attending technical conferences. The allocation of travel awards (e.g. \$300 for matching GSPA travel awards; expected 5 awards per year) is currently under discussion, with the hope to match funds for travel starting in early 2020. The data collection to determine the number of students attending conferences is in progress.

Explain any circumstances that have altered the original implementation plan:

The CEE Department has been going through many challenges since the graduate review: selection of a new Chair, implementation of the new resource allocation model, hiring of four new faculty members, massive space renovations, and the approval of the new Architectural Engineering Program. These activities have slowed down the implementation of the recommendations from the reviewers. The effects of these circumstances are expected to be reduced or eliminated in 2020.

Address any significant developments or initiatives that have arisen since the program review process, or that were not contemplated during the review:

The creation of the new Architectural Engineering Program will require an enormous amount of time from all the faculty and staff of the Department. This development will use a significant amount of resources for the hiring of new faculty and staff members and the construction of new design studios. The Architectural Engineering program has been approved and ten new faculty members will be added progressively to the CEE department. Six of these positions have been filled to date: 2 faculty and 1 lecturer were hired in 2018, 1 lecturer was hired in 2019, and 2 additional faculty have been hired to start in 2020. Three of these positions have been filled already (two faculty, one lecture); two of them started in Spring 2018. Two more positions out of the ten have been filled in 2019 (one faculty, one lecture). This new faculty complement will add new graduate courses to our program over the next few years.

Updated Implementation Plan:


	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	The minimum passing grade for graduate courses	Approval of changes by the Department and GSO.	Associate Chair Grad Studies and Grad Coordinator	Complete - Nov. 2017
2.	Participation of students in the MASc and PhD Collaborative Water Program	Encourage participation during graduate studies information sessions. Monitoring of participation by the Graduate Coordinator.	Dept. Chair and Grad Coordinator	Ongoing
3.	Inequalities in the quality of graduate student office space	Completion of renovations.	Dept. Chair and Space Committee.	Complete - Dec. 2017
4.	Faculty complement for the GEO.	New faculty position	Dept. Chair and DACA Chair.	In Progress
5.	Graduate courses in the GEO	New faculty position	Dept. Chair and DACA Chair	In Progress
6.	Funding level for international MASc	New Faculty regulations. New Department scholarships	Associate Dean. Dept. Chair. Grad Chair.	In Progress
7.	Conference attendance	New travel support	Dept. Chair. Grad Chair.	In Progress

The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.



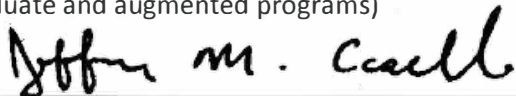
Date of next program review: _____ July 2021
Date

Signatures of Approval:

Carl Haas  Oct 7, 2019.
Chair/Director Date

Pearl Sullivan  NOV 4, 2019
Faculty or Administrative Dean Date

Associate Vice-President, Academic Date
(For undergraduate and augmented programs)

Jeff Casello 
Associate Vice-President, Graduate Studies Date
(For Graduate and augment programs)

Checklist for SUC/SGRC Reviewer Feedback Quality Assurance Office

Two-Year Progress Report: Civil and Environmental Engineering

Name of Reviewer: Elizabeth Nilsen

Date: 11/1/2019

Does the Two-Year Progress Report:

- | | | |
|--|--|------------------------------------|
| 1. Clearly describe progress achieved on the various action items in the implementation plan? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Explain convincingly any circumstances that would have altered the original implementation plan? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. For items that are behind schedule, propose an amended implementation schedule that is reasonable and credible? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Address significant developments or initiatives that have arisen since the program review process, or that were not contemplated by the program review process? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

General Comments

The CEE department seems to be working towards addressing the reviewers' recommendations – in particular new faculty hires address a number of issues. Though, as is stated, various activities have slowed the implementation (e.g, new Chair, renovations, new program), etc.