Faculty of Engineering

Faculty Council

Meeting 2022.03

13:00. Sep 28, 2022 in person in CBY 707 and on Microsoft Teams

PRESENT

Officers of the Faculty

Professors

Students

Others including guests and non-members
S. Gandolfini, H. Howes, S. Drouin, C. Morasse, J. Olivier, C. Mavriplis, C. Bjerring

EXCUSED

Officers of the Faculty
K. Hinzer

Professors
E. Dragomirescu, S. Vanapalli, H. Schriemer, A. Weck

ABSENT

Officers of the Faculty
M. Bolic

Professors
K. Meek, M. Majeed, N. Burn

Students
S. Fatima, C. Valettas, A. Vandici, A. Walters

22.03.01 Approval of the Agenda

The Dean welcomed new members.

The agenda was approved.
22.03.02 Approval of the Minutes of the April Meeting

The minutes had been approved by email.

22.03.03 E-Votes and matters arising from the minutes

In May an electronic vote was held for one motion:

**On a motion duly moved and seconded, Faculty Council approved the updated Faculty of Engineering Academic Regulations, dated May 2022**

The passing grade in Faculty of Engineering courses is now the same as in most Faculties: D.

In August, an electronic vote was held for three motions:

**On a motion duly moved and seconded, Faculty Council approved 2022-Grad-Genie-MCG-18 for MCG 5947 (seminar)**

**On a motion duly moved and seconded, Faculty Council approved 2022-Grad-Genie-BMG-19 for BMG 6996 (seminar)**

**On a motion duly moved and seconded, Faculty Council approved 2022-Grad-Genie-EED-21 for EED 5901 (internship)**

The rationale was a concern that certain students would be required to pay more tuition if these changes were not made. However, following the votes, the Vice-Dean Graduate Studies determined, in consultation with the Registrar, that only administrative approval was needed, so the three motions were not sent to Senate.

22.03.04 Report of the Dean

The Dean thanked everyone for the successful start of the semester. Work on this was intense because we were welcoming three cohorts.

A lot of students are still awaiting visas (about 15 at the undergrad level and about 40 at the graduate level), so many courses are being offered in a bimodal manner. There are now 7300 students in the Faculty, of which 3000 are International.

Health and Safety

There were a few incidents in the last couple of months. In one case a student in a laboratory dropped a glass bottle, which shattered when they picked it up. A student also dropped acid on their forearm between their lab coat and the nitrile glove. In an outreach program, someone was drilling without safety glasses and needed their eye cleaned. A student in a summer camp broke her arm while doing cartwheels.

Cybersecurity

Phishing scams have become effective from the scammer’s perspective. Sometimes Lucien Levreault sends messages pointing out that certain messages are indeed scams.

We are working on the cyber-range, a laboratory within the cyber-hub. It will be one of the top ranges IBM has deployed in the world. Co-director is Guy-Vincent Jourdan.

Accreditation
CEAB accreditation for the programs visited last academic year was only achieved for three years. Before the next visit of the CEAB we need to work particularly hard on continuous improvement. We are working with the chairs to create a rigorous calendar of activities to improve accreditation processes. We are also working on advisory committees. There should be more detail by next Faculty Council. We are following a faculty-wide approach.

Other matters

There is a change coming to the Faculty research and teaching awards. Until now we have alternated among awards for emerging researchers and all researchers. Now there are many young researchers, so we are separating those prizes: We will have a general research award and an emerging researcher award. There will be two annual teaching awards: One regular award, and an innovation award. We will be creating a prize for partnerships with outside organizations. We will also be creating a prize for interdisciplinary research.

The University is going through a period of financial restraint. Our Faculty is doing OK. Our hard work on enrolment and financial management has made a difference.

We continue to be valued by industry and international partners. We have good interactions in Mexico, Malaysia, Singapore, and Egypt. There are additional international universities that also want to partner with us.

For the first time today, we invited the administrators of the academic offices, C. Morasse, and S. Drouin, to be observers at Faculty Council.

The online booking system for meetings with the academic offices is working well.

22.03.05 Report of the Vice-Dean Research

The Vice-Dean sent a written report.

22.03.06 Report of the Vice-Dean Undergraduate Studies

The Vice-Dean sent a written report.

Enrollment

Today there was a debrief regarding the registration process. Over 700 students met with advisors during this period; 2/3 were in person. The average wait time was about 15 minutes, and the average duration of meetings was 20-22 minutes.

There is a lack of classrooms. Changes to rooms are difficult.

There are cycles in programs related to the economy. For a few years CVG was down, but this year registrations were strongly up. For CSI we are getting extreme numbers of applications. The Dean pointed out that we are only letting in students in SEG with averages in the 90’s.

Enrolments are roughly comparable to last year. 27.4% of first-year students are female. All years we are at 26%.

Most students who register are those that select us as their top choice.

Attrition
Our graduation rate after 5 and 6 years needs to improve. The Dean indicated that the change of the course passing grade to D might make a difference.

We assess students who may be at risk and arrange to meet them. There are several levels of risk from 1-5. We typically invite about 200 students out of the 1200 who start.

Ongoing student challenges related to Covid-19

There was a question regarding whether some people have put their degree on hold because they are immune compromised. It was pointed out that ventilation in buildings has been improved, but a member indicated that CO2 monitoring shows high levels, hence poor ventilation, in some classrooms. There was a question about whether we have data about whether students are dropping due to Covid: The answer is that we don't track why students are dropping. There was discussion about students missing weeks of classes due to Covid. The response was that we have asked professors to offer recordings. It was suggested that it is now an exception to find pros not recording.

Support for female students

There was a question about whether female students are disproportionately dropping. The Vice-Dean indicated that female students are actually doing better than male students in this regard. There was a question about support for female students. It was pointed out that we have support in some programs; for example, Diana Inkpen is responsible for this in CSI. It was suggested that support for female students is not being advertised sufficiently. The Vice-Dean said that there is a lot of information given to students before they arrive regarding support. The Dean indicated that email is the key way to communicate now, but we know there need to be other mechanisms. The Vice-Dean Graduate Studies pointed out that if there is missing information it would be good to point this out to the Vice-Dean Undergraduate, and/or to use IdeaScale to provide ideas.

Admission factors other than grades

There was a question about admission to the recently approved EDTI 3-year program. The answer is that after the minimum grade threshold is met; then there is an interview; then students are asked to provide a portfolio of their projects. The Vice-Dean indicated that for all programs there is a process by which an applicant can explain their personal situation during admission. Students who want to apply through this avenue should not follow the regular process. We have admitted about 15 students in this way this year.

Other matters

The Vice-Dean is on the board of the new Health and Wellness Centre. He said our students get good service from them. A member suggested that the Wellness Centre should ideally have a staff member earmarked for engineering students, since our students have specific issues.

There was a suggestion for posters on the walls and other ways of communicating to students rather than just an info-dump at the start of the year. It was suggested to have a student rep in each cohort who could communicate regularly with other students in their group, perhaps before certain classes.

22.03.07 Report of the Vice-Dean Graduate Studies

There are about 150 more incoming graduate students this year, compared to last year. The number of thesis students is a little lower.
There is a change in how students doing masters without thesis are billed. Students had been overloading a semester with too many courses to try to make their program cheaper. From now on, tuition fees for non-thesis students will be charged based on the number of credits taken. This has the side-effect that some students already in programs are seeing what appears to be a large increase. We were able to negotiate some bursaries for affected students. This was why in the summer there was an e-vote regarding the courses that had no credit-weight (see earlier in these minutes).

Some students with visa problems may still not be able to get to campus. The drop date with no refund has been moved later for those affected by visa issues and who contact the graduate office to explain their situation.

A lot of program modifications will be coming to Faculty Council for approval at the November meeting.

We are going to restart the graduate excellence award breakfast. It will be December 8th.

We are going to organize an NSERC applications information session. The deadline to apply is December 1st.

We will have the graduate poster day; we are making it earlier this year (in February). We want 4th year students to see the posters. It was pointed out that graduate supervisors normally fund preparation of posters.

The Dean indicated that a large percentage of our thesis students come from China, but that numbers from that country are falling.

There was a question about whether a course-based Masters program can be converted to a thesis based program. The Vice-Dean indicated that the answer is yes, if the student can find a supervisor.

22.03.08 Report of the Vice-Dean QATI

There was no report. The Dean suggested that people could send questions to the Vice Dean.

22.03.09 EDI Survey

L. Kristufek had distributed a survey to students, and she discussed preliminary results. Among the things that the survey indicated was that in group projects there are some discrepancies about what roles female and male students take on. She indicated that she would continue working on this survey.

The Dean pointed out that 3 out of the 5 chairs/directors are currently female.

H. Anis concurred that many profs notice that women end up with the task of writing the documentation in project courses. She said there are some solutions that we should discuss. She also said that all minority groups should be considered.

C. Mavriplis said that Leah is doing work that the Faculty should be doing. The Dean indicated that we are trying to get the EDI task force back on track. He is looking for people to be involved. It was pointed out that for accreditation, all the professional practice courses need to address EDI.

There was a question about how our Faculty compares to other Faculties of Engineering. The answer is that the problem is nation-wide. However University of Toronto used affirmative action by way of scholarships to attract women students.

The proportion of Engr.’s in Ontario is 18%; PEO has a target to increase this to 30% by 2030. There was discussion of whether this is feasible.
It was pointed out that the Departments of Physics and Mathematics have the same problem with low female enrollment, but that women students outnumber male students in most other academic units.

22.03.10 Faculty Council Nominations to Senate

On a motion duly moved and seconded, Faculty Council approved to nominate Claude D’Amours and Isabelle Catelas as members of Senate.

22.03.11 Other Business

There was none. The meeting ended at 14:46.

Timothy C. Lethbridge

Vice-Dean (Governance)