Faculty of Engineering

Faculty Council

Meeting 2023.01

13:00. Feb 08, 2023 in person in CBY 707 and on Microsoft Teams

PRESENT

Officers of the Faculty

J. Beauvais, K. Hinzer, C. D'Amours, M. Labrosse, T. Lethbridge H. Viktor, D. Spinello, H. Anis, X. Cao, M. Bolic.

Professors

A. Sowinski, A. Weck, C. Fauteux-Lefebvre, C. Kinsley, C. Lan, E. Petriu, H. Mouftah, H. Tezel, I. Catelas, J. Foster, M. Bouchard, M. Turcotte, O. Seidou, P. Branco, R. St-Gelais, T. Jin, T. Uchida, J. Zhao, H. Schriemer, A. Macchi, N. Burn, M. Majeed.

Students

R. Ferdousi, L. Kristufek, S. Anami Rad, T. Adithan, H. Adiaviakoye, L. Gbala, Z. Flahaut.

Others including guests and non-members

J. Olivier, M. Kimberley, S. Gandolfini, S. Drouin, C. Morasse, C. Bjerring.

EXCUSED

Professors

K. Meek, S. Vanapalli, L. Moura.

Students

S. Maheshchandra Patel,

ABSENT

Officers of the Faculty

D. Taylor, M. Fall.

Professors

E. Dragomirescu, M. Kavgic, H. Al Osman, N. Zaguia.

Students

A. Habash, J. Barragán, V. Acuna Gutierrez, A. Vandici, A. Walters, C. Pettipas, C. Valettas, S. Fatima.

23.01.01 Approval of the Agenda

The agenda was approved.

23.01.02 Approval of the Minutes of the November 2022 Meeting

The minutes had been approved by email.

23.01.03 Matters arising from the minutes

The motions for the DTI online and IAA online program were adopted at the January Senate.

The transition to GAIA for accreditation has been completed. There will be updates on this at a later meeting.

23.01.04 Report of the Dean

Health and Safety

There have been four incidents:

- In the ARC building a laser was turned on, but it was realized that there was no direct connection to the warning light outside.
- Somebody pricked their finger with a needle containing a chemical product that had dried out.
- There was a burst high pressure hydraulic line in the STEM building. The hose was not rated for the pressure.
- There was sparking of an extension cord in CBY.

The Dean pointed out that we must have compassion for people around us. We have students and colleagues impacted by many things going on. The Dean emphasized that people should not hesitate to ask for help.

Cybersecurity

The Cyber range should be opening in the summer and should be available for courses in the Fall.

Other matters

The pandemic has accelerated some changes that were already having effect previously. One of them is increased competition from the private sector for training and credentials. Big tech companies are moving into the health and education sector. In China they have been increasing educational capacity locally: there has been an impact as we are having lower recruitment from there. India is also increasing local capacity. Another impact on us is the extra resources we require to maintain bilingualism.

The Dean indicated that he is speaking to people focusing on their experience on campus. He said that our value proposition (our distinctive approach) has to be linked to availability of diverse experience for students.

We have had several impactful changes such as our online engineering management and the two newly-approved online programs. Our program in Cairo has been very successful: It has taught us how to run such programs. We have spent over \$430K on TAs for this program.

Offering high school courses has also been very positive for us.

We have international strategic partnerships for both research and student recruitment.

Our Faculty now has the highest reputation on campus, as measured by the Times Higher Education survey.

The CEAB passed a temporary exemption for students going on international exchanges: Students will be able to do undergraduate studies (e.g. a semester or a year) in universities internationally, and count their credits for their engineering degree.

As of now we are the only Faculty on campus without a serious challenge attracting students for September. The Dean pointed out though that our positive situation in this regard is fragile and volatile.

There was a question about the allegations from the APUO that perhaps the financial situation might be better than the University is communicating. The Dean indicated that he is on the budget committee and sees all the books, including that revenue is less than expenses. He said a key factor is that the Government froze tuition fees by 10% and froze them four years ago.

23.01.05 Report of the Vice-Dean Research

The Vice-Dean had circulated a report.

The NSERC Alliance program was re-aligned in January; they have enhanced the amount of money one can apply for, and reduced the need to rely on industrial cash.

There is an internal competition for CFI JELF grants.

Undergraduate research scholarships: There were few applications for January for Scholarships relating to International Research. A second call for summer will be coming.

23.01.06 Report of the Vice-Dean Undergraduate Studies

The Vice-Dean circulated a report.

An undergraduate student handbook is under development. Much of that information had been on the website.

We are in good shape regarding admissions.

We had delayed sending out offers in CSI and SEG as a conscious decision, so those programs don't get saturated and have to be closed before all the applications come in. Offers are now going out for them.

There was discussion of factors for admission other than grades.

On a motion duly moved and seconded, Faculty Council approved 2022-UGRD-GENIE-ELG-01. This brings the course description for ELG4179 / ELG4579 in line with 21st century reality as significant changes in wireless communications took place in the past 10-15 years. (this change had been stuck in the process for several years).

On a motion duly moved and seconded, Faculty Council approved 2022-UGRD-GENIE-MCG-01 This introduces new technical electives into the programs. It adds a new stream D (Biomedical) for the biomedical mechanical engineering program under the technical electives. It removes MCG4150 from the Stream C: CAD/CAM - Industrial Engineering and adds it to the new stream D.

There was discussion of double-coding of some of the courses in the above with graduate codes.

The next three planned motions were considered as a group and address comments from the CEAB that the engineering economics content (part of graduate attribute 11) was too limited in their opinion. The three planned motions withdraw GNG2101 from EECS programs and replace it with ECO1192, the course which had previously been offered in these programs before GNG2101 was created.

There was considerable debate on this issue. Some key points raised:

- It was suggested to improve the engineering economics content of GNG2101 instead of making this change, and EDTI Director H. Anis agreed that this could be done.
- EECS is worried that the programs would not be accredited unless they make this change.
- It was pointed out that there is nothing in CEAB rules that says it has to be a full course, and CEAB indeed like an integrated approach.
- It was suggested to make curriculum maps of what needs to be covered and how it is actually covered in multiple courses.

The Dean pointed out that the CEAB don't tell us what courses to offer. Other universities use project-based learning to cover material. We have not had good experience with service courses. The Dean said that, should the service course ECO 1192 be reintroduced for engineering economics, he wants this formulated as temporary.

A motion to table the motions was adopted.

Motion (tabled) 2022-UGRD-GENIE-CEG-01. Remove the alternative between the course ECO1192/1592 (Engineering Economics/Science économique pour les ingénieurs) and GNG2101/2501 (Introduction to Product Development and Management for Engineers and Computer Scientists/Introduction à la gestion et au développement de produits en génie et en informatique) and keep ECO1192/1592.

Motion (tabled) 2022-UGRD-GENIE-ELG-02. Replace GNG 2101/2501 (Introduction to Product Development and Management for Engineers and Computer Scientists) with ECO 1192/1592 (Engineering Economics).

Motion (tabled) 2022-UGRD-GENIE-SEG-01. Replace GNG 2101/2501 (Introduction to Product Development and Management for Engineers and Computer Scientists) with ECO 1192/1592 (Engineering Economics). Remove PHY 2104/2504 (Introduction to Circuit Theory and Electronics) from the course list. Merge the Software Engineering and Computing Electives lists as a Technical Electives list.

23.01.07 Report of the Vice-Dean Graduate Studies

The Vice-Dean distributed a written report. He orally discussed various scholarships.

Last year we had 81 applications for PhD, this year 93. The number of PhD students is already considerably higher than last year.

It was pointed out that the OGS scholarship application process was problematic. The website was not working for some time. It was suggested that those affected email the Dean and the Vice-Dean Research.

There were discussions about admission scholarships ending after four years, even though there was a Covid shutdown during that period.

23.01.08 Impact of the financial situation on graduate students

L. Kristufek indicated that there had been discussion about the number of TA positions being reduced. She had heard that in CVG the TA budget was perhaps reduced by 30% and asked for a clearer understanding.

The Dean said that the Faculty did not directly reduce TAs. We had accomplished our cuts by delays in hiring or not replacing professors and staff, and that these savings were not related to TAs. He indicated though that other Faculties has been asked to reduce their TA budgets.

Silvana Gandolfini confirmed that in the Faculty of Engineering we have not cut TA budget.

There was also a comment that some students have not received a TA when they had thought they would. It was suggested in particular that chairs look out for biomedical students in this regard.

23.01.09 Other Business

Timeline and mode of delivery of Faculty Council documents.

Marcel Turcotte indicated we had received the agenda and motions very late in the last two meetings, and that material had been put only in the calendar entry, which is not what people are used to (they were only sent by email later).

It was agreed that the agenda and motions would in future be circulated at least 5 working days before meetings by email, and that the Dean's assistant would call for any motions from the Vice Deans several days before that.

Thanks to members who are leaving

This is the last Faculty Council for Silvana Gandolfini, who has been CAO for 26 years and is retiring. The Dean formally thanked her.

This is also the last meeting for the current students and part time professors, since elections will be held, and the new members will start April 1.

The meeting ended at 14:40.

Timothy C. Lethbridge

Vice-Dean (Governance)