

Faculty of Engineering

Faculty Council

Meeting 2021.03

1:00 p.m. May 5, 2021 online on Microsoft Teams

PRESENT

Officers of the Faculty

J. Beauvais, K. Hinzer, L. Peyton, M. Labrosse, D. Taylor, T. Lethbridge, N. Baddour, B. Kruczek, C. Rennie, A. Felty, H. Anis.

Professors

JP. St-Pierre, A. Sowinski, C. Lan, B. Martin-Perez, J. Infante Sedano, E. Dragomirescu, M. Noël, D. Inkpen, E. Petriu, H. Schriemer, G-V. Jourdan, M. Bouchard, J. Zhao, N. Zaguia, T. Uchida, R. St-Gelais, JL De Carufel, W. El Ahmar, M. Majeed

Students

F. Jaheen, R. Ferdousi, A. Bezerra, A. Fella Jahromi, S. Kateel, N. Castro, H. Yue Wang, V. Jidkov, S. Li, M. Lynds, R. Ebrahim, K. Bondy

Others including guests and non-members

F. Bouchard, K Bournes, M. Kimberley, S. Gandolfini.

REGRETS

Professors

B. Dhillon, A. Macchi, I. Catelas, J. Yao

Students

P. Kennedy

ABSENT

Officers of the Faculty

C. D'Amours

Professors

H. Al Osman, B. Lessard, H. Aoude, A. Weck

Students

E. LeBlanc, S. Knysh

21.03.01 Approval of the Agenda

The Agenda was approved.

21.03.02 Approval of the Minutes of the March Meeting

The minutes had been approved by email.

21.03.03 Matter arising from the minutes

There was none

21.03.04 Letter of intent for the Bachelor of Engineering Technology 3-year program

The Vice-Dean (Undergraduate) indicated that the program is being presented for consultation processes and formal approval is not required at this time. Everything is still preliminary; even the name of the program is still not certain.

Hanan Anis presented the program, which will be 90 units and focus on multidisciplinary engineering technology. It is hoped that the program will be flexible, allowing students to enter our faculty more easily, or use it to leave other engineering programs with a 3-year degree, for example if they want to take law or medicine.

The program as currently planned has five spines: Impact of engineering, multidisciplinary engineering design, digital and data fluency, professional skill development, and experiential learning.

There were many questions, and comments about the program, with key ones summarized in the following paragraphs.

Should the word ‘engineering’ be present? ‘Design’ might be better. Reasons include protection of the word ‘engineering’ by the regulator, the possibility that the CEAB might object to the word being present in an unaccredited program, and avoiding confusing students who might think they will graduate as engineers. Also, there was a question about whether the currently proposed title would cause confusion regarding the profession of engineering technologist, that is licensed in some jurisdictions: This program may not be designed to cover the requirements of such a profession. It was suggested that being in the Faculty of Engineering might incorrectly communicate that it is an accredited engineering program. It was also noted that the use of the word Engineering in the title of the program may be seen as a barrier for young women’s entry to the program.

There needs to be specifications of how a student can transfer out of each of our Faculty’s existing programs to this new program, perhaps after first year or even third year, while retaining credits and graduating in a reasonable time. There also needs to be a specification of how a student who starts in this program can transfer to the other programs in the faculty (such as after first year, or perhaps even later) while retaining as many credits as possible and graduating in a reasonable time. It was pointed out that the program might not be advertised initially to high school students for direct entry.

To make the program more welcoming and inclusive, it was suggested to lighten the admissions. Perhaps to just one of the mathematics pre-requisites and one of the sciences, and also to allow Computing 4U.

Hanan Anis confirmed that work will be done this summer to enhance flexibility and define equivalency rules.

It was suggested that there perhaps might be too many new courses, given the professors available. Hanan Anis pointed out that the program only starts in 2023, so the courses will be phased in and some will only need to be taught by 2026.

There was discussion of ‘community hours’. This would be designed to be much more structured than community hours required in high school, and was is noted that the University of Toronto already has a similar program.

There was a question about what jobs students would be able to apply for after completing this degree, and what employers would recognize the program as meeting their hiring needs. It was

pointed out that employers have been consulted, and that similar programs elsewhere are successful in this regard. The Dean pointed out that there are also issues with our existing programs regarding what employers are looking for.

It was pointed out that the program should not be seen to be a 'light' version of engineering.

There was a suggestion to consult the co-op office regarding the internship aspects.

There was suggestion to consider allowing students to take a double degree that includes this degree as one component.

There was a question regarding the possibility for the students in this program to continue on to graduate programs. Liam Peyton indicated that there exists the possibility of pursuing micro-credentials and graduate courses before entry at the graduate level that could facilitate a bridging process. The DTI program already has admission requirements based on specific undergraduate courses rather than the number of years in an undergraduate program, and similar conditions could be developed for other programs if desired.

Several members offered positive comments regarding the timeliness and importance of developing and offering this new program.

21.03.05 Report of the Dean

We are getting close to the time when admissions acceptances will be final. We are doing well. There is, however, a shift regarding where international students are choosing to go among universities in Canada and around the world.

At the graduate level we are also doing OK regarding admissions.

Michel Racine, IT manager, has retired and been replaced by Lucien Levreault.

We are working on preparing the labs for next Autumn. We were working on the return to campus when the third wave hit. The expected start of return to campus is now late June.

21.03.06 Proposal: Public Scholars program

Arash Fella Jahromi presented this proposal. The purpose of the proposal is to arrange for students to learn to perform knowledge transfer in order to introduce emerging research to industry and society. A similar program is university-wide at Concordia; here it is being proposed initially just for the Faculty of Engineering. Students would learn to communicate their research results in language accessible to the public, and interact with the media.

There was discussion of various aspects. It was pointed out that many students get media exposure through Design Day and similar events.

There was a question about who might provide training. It was suggested that members of the media could help with this. In a similar program at Concordia, the Montreal Gazette provides some training.

The Dean pointed out that it is extremely important for computer scientists and engineers to be able to communicate to Canadians very effectively. He mentioned a television campaign in Quebec that describe to the public what engineers do. He said that we do not have the resources to implement the proposed Public Scholars right away; at Concordia it is at the institutional level where there are specific resources. We are already working on training people how to talk to the media. It is not sufficient to simply invite the media; it is hard to get reporters to come to events.

The Vice Dean Research indicated that the Office of the Vice President Research is looking into 'knowledge translation' and 'knowledge mobilisation'.

The Dean pointed out that this can fit under 'professional skills development'.

21.03.07 Other Business

There was none. The meeting ended at 14:28

Timothy C. Lethbridge, Vice-Dean (Governance)