# Faculty of Engineering

# Faculty Council

# Meeting 2021.01

# 10:00 a.m. Jan 18, 2021 online on Microsoft Teams

## **PRESENT**

#### Officers of the Faculty

J. Beauvais, K. Hinzer, L. Peyton, M. Labrosse, D. Taylor, T. Lethbridge, C. D'Amours, N. Baddour, B. Kruczek, C. Rennie, A. Felty, H. Anis.

#### **Professors**

JP St-Pierre, B. Lessard, A. Sowinski, C. Lan, A. Macchi, H. Aoude, B. Martin-Perez, J. Infante Sedano, E. Dragomirescu, H. Schriemer, H. Al Osman, D. Inkpen E. Petriu, GV Jourdan, M. Bouchard, J. Zhao, T. Uchida, A. Weck, R. St-Gelais, M. Hasan, M. Majeed.

#### **Students**

H. Raissadat, Z. Al-Faesly, S. Knysh, A. Al-Zaidi, V. Jidkov, I. Brine, C. Choueifaty, K. Nizam.

### Others including guests and non-members

H. Victor, F. Bouchard, H. Howes, M. Kimberley, S. Gandolfini.

#### REGRETS

#### **Professors**

M. Noël, B. Dhillon, I. Catelas, J. Yao

# **ABSENT**

#### **Professors**

JL De Carufel, N. Zaguia.

#### **Students**

S. Singh, S. Aman, R. Zeid, A. Almero, V. Gabriel, P. Patel, H. Egla.

## 21.01.01 Approval of the Agenda

The Agenda was approved.

# 21.01.02 Approval of the Minutes of the November Meeting

The minutes had been approved by email.

## 21.01.03 Matter arising from the minutes

The Senate has approved the creation of the School of Engineering Design and Teaching Innovation. It currently has no professors. Its acting Director is Hanan Anis.

### 21.01.04 Report of the Dean

The Dean has started his round of meetings with professors, with a plan to personally meet  $1/3^{rd}$  of professors each year.

The Dean thanked everybody for their extra work during the pandemic.

### Cybersecurity

Phishing scams are received regularly by professors, students, and staff of the Faculty. The Dean pointed out that some emails appear falsely to come from him. He emphasized that he will only ever write to employees from his uOttawa email address.

The Dean expects to participate in Cybersecurity updates from the Federal Government.

### **Health and Safety**

There have been no incidents.

Stay-at-home measures in Ontario are not currently affecting our procedures.

This is Wellness Week at uOttawa. The link is here: https://www.uottawa.ca/wellness/events/wellness-week

#### Information collected

At Executive meetings, we have ongoing discussions about the information we collect from students and others in surveys, and are adapting policies based on the data.

#### Recruitment

The Dean had been concerned about recruitment due to the online nature of the Open House. There is a trend showing how universities are confirming their offers: The perceived top universities are seeing significant increases in their admission applications, particularly first-choice applications. We have a slight increase. Smaller universities are seeing a significant drop.

We are having our VIP event for top admitted students shortly. In recent years 2/3rds of these students have ended up attending our Faculty.

Our graduate programs have been significantly revised over the last year or so.

The online version of our Engineering Management program is starting soon, and is proving very popular.

The U6 is initiating a new PhD Scholarship targeted at encouraging Black and Indigenous students to obtain their PhD's.

# 21.01.05 Report of the Vice-Dean Research

The Vice-Dean circulated a report.

The Covid-19 return-to-research plan phase 2.5 has been in place since November 19<sup>th</sup>. The Vice Dean emphasized that people with symptoms should not come in to campus and should go for a test. She said to postpone research you do not need to do today until after the state of emergency.

She discussed the Canada Research Continuity Emergency Fund. We will know about stage 3 and 4 funding in about 3 weeks. This comes with some conditions, and affected professors will receive an email.

The Vice-Dean discussed grant applications. We are planning for the next CFI phase. This afternoon we will be submitting six concept CFI proposals to the university.

We submitted several nominations for prizes for Faculty members.

The Faculty have been involved in some virtual events with industry.

The Vice-Dean discussed various international collaborations, including with TEC Monterey.

We have had an audit of certain labs from the Office of the Vice President Research, and will be receiving results in the next few months.

### 21.01.06 Report of the Vice-Dean Undergraduate Studies

The Vice-Dean circulated a report.

The Vice-Dean is very satisfied with the virtual appointment system, with managed wait lines for undergraduate students. On the first day there were 85 appointments with 5-minute wait time.

Students will be able to elect to convert one grade from the Fall into S/NS. This will delay the release of the academic standing.

We have received a lot of feedback about the online teaching and learning experience. The Vice-Dean encouraged everybody to be positive and discussed the following issues:

- It is not best practice for a final exam to account for a high percentage of the course, unless there have been tests earlier in the semester to give students feedback.
- Some profs need to be reminded to stay on time in their classes (which might mean cutting material).
- A best practice is to record and post synchronous lectures in Brightspace.
- Students report that some professors are not responding to email, or whatever other communication channel is arranged for the class.
- It is important to troubleshoot technology in advance of classes.

There was discussion of workload for students and professors. It was pointed out that holding multiple assessments, although good practice, tends to increase workload.

The Vice-Dean discussed revitalization of programs. The goal is not to attract greater numbers of students, but is to improve our standing and make our programs more attractive. He pointed out that we are using an employment database from Burning-Glass.com. We have asked for an analysis to be generated from this tool for our programs. We want to find out the extent to which we are aligned with the job market, and if not, then what changes we could make to our programs. This could lead to program improvements, new courses or micro-programs.

The Vice-Dean is interested in establishing a 3-year program in general engineering that may not need to be accredited. This could cater to students who do not do so well, but could still graduate. There are some good students who could be interested in this.

Application and admission numbers look healthy.

#### **Changes to Undergraduate programs**

On a motion duly moved and seconded, Faculty Council approved 2020-UGRD-GENIE-SEG-01. This allows EVS 1101/1501 Introduction to Environmental Science or PHY 2390/2790 Astronomy as alternatives to required course PHY 2104 / 2504 Introduction to Circuit Theory and Electronics. It corrects the notes listed in the calendar. And it creates a new course SEG4170/4570 Enterprise Architecture and Design / Architecture et modèles d'entreprise that is allowed as a Software Engineering elective.

# 21.01.07 Report of the Vice-Dean Graduate Studies

The Vice-Dean circulated a report

The Vice-Dean pointed out that anyone entering Canada by air needs a Covid test within 72 hours prior to boarding.

He also indicated that it is essential for students to come to Canada to get their degree. He said that some mistakes are being made, including denied visas; these have been appealed.

For the upcoming online Engineering Management program, we are partnered with a 3<sup>rd</sup> party Keypath that is advertising the program and will he helping support students as they study.

We will be promoting some courses through the Centre for Next-Generation Networks, and will receive some revenue from this.

We have an agreement with Egypt to develop a Master's program that will be taken online there.

Not counting the Egypt program and the Online Engineering Masters program, our applications are a little down from prior to the epidemic. However, our numbers are still at comfortable levels since our growth in the last few had been particularly high.

There has been some hesitancy for professors to recruit students due to the requirements to guarantee support. The Vice-Dean is working on this situation.

There was discussion of the grade a Master's applicant needs to achieve in order to obtain an entrance scholarship; the criteria have been tightened. The Vice-Dean indicated that key is for us to recruit the best PhD students. We will be flexible in fast-tracking the best Master's students into the PhD program.

We continue to allow students to take some courses in their final undergraduate year that will count also towards their Master's degree.

It was pointed out that there is pressure to reduce time-to-graduation; this is affecting several matters, including the limitations on the duration of funding from NSERC.

# **Changes to Graduate programs**

On a motion duly moved and seconded, Faculty Council approved 2020-GRAD-GENIE-SEC-23. This proposes a Microprogram in cybersecurity leading students to acquire specific skills in the disciplinary or interdisciplinary area of software security without requiring them to complete a full set of degree requirements. These microprograms are a form of academic microcredential that can be recognized and stackable for a future degree program. The courses can count for undergraduate students too. This applies to CSI, ELG, SYS and EED.

On a motion duly moved and seconded, Faculty Council approved 2020-GRAD-GENIE-AIT-24. This is proposing a microprogram in interdisciplinary Artificial Intelligence (AI) that will lead students to acquire skills in interdisciplinary AI without requiring them to complete a full set of degree requirements. This currently applies to SYS and EED.

On a motion duly moved and seconded, Faculty Council approved 2020-Grad-Genie-DTI-25. 1- DTI 6401 (3 units) User Experience Principles and Practices will be abolished and replaced by DTI 6402 (1.5 units): same title and description, simply a reduction in units. 2- DTI 6170 (1.5 units) Cybersecurity Systems and Strategies will be abolished and replaced by DTI 6160 (3 units): same title and description, simply an increase in units. 3- Creation of courses (1.5 units each): DTI 6403 User Research, DTI 6404 Interaction Design, DTI 6405 Design Thinking

On a motion duly moved and seconded, Faculty Council approved 2020-GRAD-GENIE-ELG-26. Creation of two courses (each 3 units): ELG 5xxx Cloud Computing Systems and Services; ELG 5xxx Big Data Analytics.

## 21.01.08 Other Business

The meeting ended at 11:34

Timothy C. Lethbridge

Vice-Dean (Governance)