



Council of the Faculty of Applied Science & Engineering
Minutes of the Meeting of December 16, 2021

PRESENT: Javad Mostaghimi (Speaker), Chris Yip (Dean), Ravi Adve, Dionne Aleman, Barbara Alexander, Grant Allen, Danita Allick, Cristina Amon, Julie Audet, Gisele Azimi, Jason Bazylak, Chris Beck, Evan Bentz, Laura Berneaga, Archit Bhargava, Raymond Bhushan, Shlomo Bibas, Eric Bryce, Markus Bussmann, Warren Chan, Heba Chehade, Hai-Ling Margaret Cheng, Alan Chong, Sam Chowdhury, Shai Cohen, Fiona Coll, Tom Coyle, Chris Damaren, James Davis, Sonia De Buglio, Ali Dolatabadi, Mihai (Mishu) Duduta, Natalie Enright Jerger, Greg Evans, Saima Fancy, Jennifer Farmer, Ramin Farnood, Jacqueline Fleisig, Diane Giang, Andrew Grindal, Michael Gruninger, Piyush Gupta, Sarah Haines, Jason (Jae) Hattrick-Simpers, Angela Henshilwood, Glenn Hibbard, Muktar Homam, Greg Jamieson, Mark Jeffrey, Charles Jia, Omar Khan, Andrew Kidd, Dawn Kilkenny, Donald Kirk, Deepa Kundur, Seungjae Lee, Keryn Lian, Heather MacLean, Don MacMillan, Sam Mantenuto, Elham Marzi, Paul Milgram, Hani Naguib, Shivani Nathoo, Graeme Norval, Doug Perovic, Khoman Phang, Nelly Pietropaolo, Doug Reeve, Mark Rittinger, Lisa Romkey, Vahid Sarhangian, Ervin Sejdic, Xiao Shang, Lily Shu, Brent Sleep, Marisa Sterling, Ken Tallman, Deborah Tihanyi, Hamid Timorabadi, Chris Twigge-Molecey, Chirag Variawa, Jay Werber, Elizabeth Whitmell, Lydia Wilkinson, Bernard Wong, Ning Yan, Paul Yoo, Yu Zou

SECRETARIAT: Caroline Ziegler, Alex Schroen

GUESTS: Inga Breede, Chris Brown, Sharon Brown, Mikhail Burke, Melanie Carrington, Leanne Dawkins, Jennifer Fabro, Leslie Grife, Cathy Grilo, Christina Heidorn, Jess MacInnis, Marit Mitchell, Don Newton, Shannon Osborne, Dan Pettigrew, Zeeshan Rayees, Alex Tichine, Allison Van Beek, Aaron Wang

1. Speaker's Welcome

Speaker Javad Mostaghimi called the second Faculty Council meeting of 2021-2022 to order at 12:10 pm. He welcomed members and guests, acknowledged the University's use of traditional land and reviewed protocols for the virtual meeting. There were no questions.

2. Approval of Agenda

Report 3693: Updated Bylaws of the FASE Council and Report 3694R: Updated Academic Appeals Board Manual were distributed on November 16, 2021, 30 days before the Council meeting as required by our bylaws. The agenda and remaining reports were distributed on December 5, 2021. The memorial tribute to Professor Emeritus Charles Chaffey was posted on the Faculty Council webpage on December 13, 2021.

There was no discussion and on a motion duly moved, seconded and carried, it was resolved –
THAT the agenda be approved.

3. Introduction of New Faculty

New faculty members Mihai (Mishu) Duduta of the Department of Mechanical & Industrial Engineering and Jason (Jae) Hattrick-Simpers of the Department of Materials Science & Engineering were introduced by their respective chairs.

4. Approval of the Minutes of Previous Meetings

No errors or omissions were noted in the minutes of the previous meeting and on a regular motion duly moved, seconded and carried, it was resolved –

THAT the minutes of the meeting of October 18, 2021 be approved.

5. Memorial Tribute to Charles Chaffey

Grant Allen, Chair of the Department of Chemical Engineering & Applied Chemistry, read the following memorial tribute in honour of Professor Emeritus Charles Chaffey.

Be it resolved –

THAT the Council of the Faculty of Applied Science & Engineering record with sincere regret the death on October 15, 2021 of Professor Emeritus Charles Chaffey in his 80th year.

Professor Chaffey completed his BSc in Chemistry at McGill University in 1961 and then went on to complete his PhD in Chemistry with Professor Stanley Mason at McGill in 1965. He joined our Department of Chemical Engineering and Applied Chemistry in 1967 as an Assistant Professor, was promoted to Full Professor in 1981, and retired in 2004. During his career he spent his research leaves at various institutions including Imperial Chemical Industries in the UK, University of Massachusetts at Amherst and Xerox Research Centre in Mississauga. He published 40 papers in top quality journals in the field of polymer rheology.

After his retirement, Charles became an active member of Senior College at the University of Toronto, including serving as Chair of their Budget Committee. He was active in his church, was an avid hiker and naturalist and also taught environmental chemistry part time at Tyndale University College in Toronto.

Professor Chaffey was a much beloved colleague who cared deeply about our community and the role that we play in society as educators and scholars. He was meticulous and thoughtful with a subtle and dry sense of humour and a strong spiritual ethic. Charles regularly stayed in contact with the Department of Chemical Engineering and Applied Chemistry well after his retirement. He was a regular attendee at our Departmental Seminars including our many virtual

seminars this past year, something that he thoroughly enjoyed attending and contributing to with thought provoking questions.

Be it further resolved –

THAT this tribute to Professor Emeritus Charles Chaffey be inscribed in the minutes of this Council meeting, and that copies be sent to his family as an expression of the respect and gratitude of the members of Council.

The Speaker assumed concurrence with these resolutions and Council observed one minute of silence in honour of Professor Emeritus Chaffey.

Professor Grant added his own reflections on Professor Emeritus Chaffey and commended Council for providing an opportunity to pay tribute to professors emeriti, who remain part of the fabric of our engineering community long after they retire.

6. Report of the Dean

Dean Chris Yip welcomed all to the Council meeting and provided the following remarks.

(a) Examinations and the Winter Session

According to guidance from local governments and public health agencies to mitigate the spread of COVID-19 and the Omicron variant, there will be no further in-person final examinations taking place this term. Engineering final examinations scheduled to take place remotely between December 16 to 21, 2021 will proceed as planned. Final in-person examinations scheduled during this time will not be moved online, rescheduled or replaced with another assessment. Instead, final marks for these courses will be calculated from existing term work.

Petition deadlines for undergraduate and graduate students will be extended to allow students to see their final assessed mark before deciding whether to petition for a deferred final examination. Winter term 2022 classes will begin remotely, with undergraduate and graduate courses resuming in-person on January 31, 2022. Staff and faculty members will be on campus for essential in-person work only until January 31, 2022.

(b) Academic Leadership Updates

Ramin Farnood, current Vice-Dean, Research, has been appointed Chair of the Department of Chemical Engineering & Applied Chemistry for a five-year term, from January 1, 2022 to December 31, 2026. Thank you to Grant Allen for 10 plus years of exemplary service as Chair. Grant's dedicated and thoughtful leadership has been very much appreciated by faculty, staff, students and alumni.

The following academic appointments were also noted: Stark Draper of Electrical & Computer Engineering as Interim Vice-Dean Research for a six-month term, from January 1 to June 30,

2022; Dawn Kilkenny of Biomedical Engineering as Vice-Dean, First Year; Dionne Aleman of Mechanical & Industrial Engineering as Associate Dean, Cross-Disciplinary Programs; and Heather MacLean of Civil & Mineral Engineering as Vice-Dean, Strategic.

The Vice-Dean Strategic is a newly created academic administrative role that reports to the Dean and works closely with the Dean and Vice-Deans to provide leadership on all aspects of strategic importance to the Faculty, including infrastructure, collaboration and institutional initiatives.

A sincere thank you to all who were involved in these searches.

(c) Research WRAP-UP Newsletter

The Office of the Vice-Dean Research has officially launched *WRAP-UP (Weekly Research & Partnership Updates)*, a newsletter which consolidates ad hoc communications to faculty and provides timely information on research funding and partnership opportunities, articles, and news. Six newsletters have been published so far.

(d) Engineering Alumni Network Awards

We recognized outstanding alumni and students for their accomplishments and contributions to the Skule™ community at November's 2021 Engineering Alumni Network Awards. Whether inventors, founders, executives, athletes, artists, musicians or community volunteers, their ability to think analytically, creatively and globally is changing lives around the world.

(e) Administrative Staff Awards Program

Nominations for the Faculty's 2022 Administrative Staff Awards are now being accepted and should be submitted to the Director, Awards and Honours by February 4, 2022.

(f) Coffee with Chris

The Faculty held its first *Coffee with Chris* of the academic year on November 15, 2021, for undergraduate students. It fueled interesting discussions on varied topics such as exams, first-year workload and student experience. Additional recommendations can be submitted to the Dean's Office. Another undergraduate *Coffee with Chris* is being planned for late winter, and a session for faculty and staff is scheduled for January 2022.

Discussions

The Speaker thanked the Dean for his report and invited questions.

Council members discussed whether students could return to campus earlier than scheduled if the Omicron variant is less harmful than predicted. It is ultimately up to the University President and Vice-Provost. It was recommended that international students not leave the country because they may have difficulties returning if conditions worsen, and they should try to stay within an hour or two of Toronto's time zone for ease of attending classes.

7. Updated Bylaws of the Faculty of Applied Science and Engineering Council

The Speaker noted that this and the following report (3694 Revised) will be considered by special motion, requiring a two-thirds majority of members present and voting to carry.

Doug Reeve, Professor Emeritus and Chair of the former Working Group to Update Standing Committees of Council, presented Report 3693, revisions to our Faculty's bylaws. These amendments are based on the updated *Procedures for Committees of Council*, which was approved by Council in April 2021, and include the updated function and membership of the standing committees of Council (with the exception of the Research Committee), the Academic Appeals Board and for the first time, the Executive Committee of Council. These updates were created in consultation with the standing committees and were endorsed by the Executive Committee at special meetings in June 2021.

At the conclusion of the presentation, the following special motion was moved and seconded –

THAT the proposed changes to the bylaws of the Council of the Faculty of Applied Science and Engineering, as described in Report 3693, be approved effective January 1, 2022.

Professor Reeve noted an error in section B4.2.2 of the revised bylaws, where several standing committees of Council had not been updated to reflect their new names.

The following motion to amend was then moved and seconded –

THAT the eight specifically named standing committee chairs in Section B4.2.2 be deleted and replaced by "The Chair of each of the standing committees of Council as named in Section B4.3.1."

There was no discussion and the motion to amend was carried.

The original motion, as amended, was on the floor:

THAT the proposed changes to the bylaws of the Council of the Faculty of Applied Science and Engineering, as described in Report 3693 **Revised**, be approved effective January 1, 2022.

There was no discussion and the special motion was carried.

8. Updated Academic Appeals Board Manual

Don Kirk, Chair of the Academic Appeals Board, presented Report 3694 Revised. Significant updates to the Board's manual include changing its name and term of office; increasing its membership composition to include an ISTEP representative and an additional undergraduate student; formalizing the composition of the hearing committee; moving the hearings and documentation online; adding an equity, diversity and inclusion statement; and reformatting the manual to better align with those of the standing committees.

At the conclusion of the presentation, the following special motion was moved and seconded –

THAT the revised Academic Appeals Board manual, as described in Report 3694 Revised, be approved effective January 1, 2022.

The motion was carried.

The Speaker stated that the following reports were endorsed by the Executive Committee of Council at its November 24, 2021 meeting and are recommended for Council's approval as regular motions. They require a simple majority of members present and voting to carry.

9. Participation in Minor in Global Leadership

Dionne Aleman, Associate Dean, Cross-Disciplinary Programs, presented Report 3700 Revised, a proposal for FASE to participate in a tri-campus Minor in Global Leadership. This minor will complement, integrate and augment the current curricular offerings available in global and international studies within divisions and Faculties at the university. In addition to the St. George, Scarborough and Mississauga campuses, partner Faculties include Engineering, Arts & Science, Kinesiology, and Architecture.

At the conclusion of the presentation, the following regular motion was moved and seconded –

THAT participation of the Faculty of Applied Science & Engineering in the tri-campus Minor in Global Leadership, as described in Report 3700 Revised, be approved effective September 2022.

There was no discussion and the motion was carried.

10. Creation of Certificate in Public Health and Engineering

Dionne Aleman, Associate Dean, Cross-Disciplinary Programs, presented Report 3701 Revised, a proposal created with the Dalla Lana School of Public Health (DLSPH) for a Certificate in Public Health and Engineering that will better prepare Core-8 and Engineering Science students for professional practice and highlight an opportunity for future graduate studies in both Faculties. There is interest in evolving the certificate into a full minor in a couple of years once demand has been assessed.

At the conclusion of the presentation, the following regular motion was moved and seconded –

THAT a Certificate in Public Health and Engineering, as described in Report 3701 Revised, be approved effective September 2022.

The Vice-Dean, Research added that there are many opportunities for Engineering to contribute to public health and vice-versa; for example, DLSPH and FASE recently co-authored two reports that relate to pandemic preparation.

The motion was carried.

11. Limiting Number of Transfer Credits for Engineering Minors and Certificates

Dionne Aleman, Associate Dean, Cross-Disciplinary Programs, presented Report 3709 Revised, a proposal to limit the number of transfer credits counting towards a minor to three courses (1.5 FCE) per minor, and to limit the transfer credits for a certificate to one course (0.5 FCE) per certificate.

At the conclusion of the presentation, the following regular motion was moved and seconded –

THAT the number of transfer credits counting towards minors and certificates be limited as described in Report 3709 Revised.

Although students can pick up as many as five or six complementary studies transfer credits during the summer that would be eligible for a minor, a very small number of them claim more than the proposed 50 per cent (up to three courses) maximum. Students who take their fourth year abroad could also accumulate more than the proposed 50 per cent maximum transfer credits. The Cross-Disciplinary Programs Office will communicate this limit to students before students plan their transfer credits and schedule their fourth-year courses.

Students are able to use core courses taken earlier than fourth year toward a minor, but many do not have much room for electives until their third or fourth year. They may be taking summer courses at other universities to avoid overloading their U of T courses or because other institutions offer a greater selection of courses. It was pointed out, however, that Engineering's minors and certificates are generally designed to be completed with no, or minimal, overloading, and that the timing and offering of courses that can be counted toward minors is constantly reviewed.

The motion was carried.

12. Major Curriculum Changes for the 2022-2023 Academic Year

Evan Bentz, Chair of the Undergraduate Curriculum Committee, presented Report 3704, curriculum changes for the next academic year affecting undergraduate programs in all departments as well as in BME, ISTEP and Cross-Disciplinary Programs.

At the conclusion of the presentation, the following regular motion was moved and seconded –

THAT the proposed curriculum changes for the 2022-2023 academic year, as described in Report 3704, be approved.

During discussions, a Council member pointed out that no justification has been given in the report for increasing the tutorial hours for *CHE324H1: Process Design* from one hour to two (section CHE 5.1), and that this increase is contrary to the recommendation arising from the

recent Chemical Engineering external review to reduce the program's tutorial time in courses. A UCC representative from Chemical Engineering responded that the change addresses feedback from students over the past few years and it will add time, if needed, to work within teams and review course concepts with TAs. The increase in tutorial hours was approved by the department's undergraduate curriculum committee. It was proposed that the report be kept as is because of time implications for scheduling, and that this specific recommendation can be removed at a later date if required.

A member of Council noted a typo in section BME 3.2 of the report concerning *BME530: Human Whole-Body Mechanics* with regard to the proposed number of practicum hours. Professor Bentz undertook to make this correction.

Another Council member mentioned that reducing student course load does not necessarily reduce their contact time. These are related concepts but they can be independent of each other.

The motion was carried.

13. Reports for Information

The following standing committee reports were approved by the Executive Committee of Council at its November 24, 2021 meeting.

(a) Engineering Graduate Education Committee: Update

Julie Audet, Vice-Dean, Graduate Studies and Chair of the Engineering Graduate Education Committee, presented Report 3708, which lists newly approved APS and MIE courses and minor modifications to MIE1050 and MIE1628. The program requirements for the MEng Emphasis in Analytics were also modified.

There was no discussion and the report was received for information.

(b) Admissions Committee: Admissions Cycle 2021

Alan Chong, Chair of the Admissions Committee, presented an update on the 2021 admissions cycle contained in Report 3707.

Council members discussed the value of broad-based admissions and initiatives regarding equity, diversity and inclusion when incoming students have such high grades. In response to a request to report on additional diversity metrics, Professor Chong said that the committee has been considering a broader sense of diversity and how to use it fairly during the admissions process, and that this may be included in future admissions cycle updates.

Members also discussed plans to reduce the intake of first-year students which has been slowly increasing. This is worrisome on many fronts, including the lack of space in classrooms. Dean Yip confirmed that our targets have not shifted; we have gotten an increased yield over the last two

years because the yield equation during the pandemic has been different from normal years. The report was received for information.

(c) Scholarships and Awards Committee: Goals for 2021-2022

Jennifer Farmer, Chair of the Scholarships & Awards Committee, presented Report 3703. The committee's goals for its current term (October 2021-September 2022) include renewing its manual; moving its meetings online; making the e-Portfolio more user-friendly; and continuing to create awards and scholarships, promote external awards, and investigate and develop a more formalized process for awards for students overcoming hardships.

There was no discussion and the report was received for information.

14. Other Business

There were no other items of business.

15. Date of Next Meeting

The next Faculty Council meeting is on February 18, 2022.

16. Adjournment

The meeting was adjourned at 1:56 pm.

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