

York University Senate

Notice of Meeting

Thursday, February 16, 2017, 3:00 pm

Senate Chamber, N940 Ross Building

AGENDA

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1. Chair's Remarks (L. Beagrie)	
2. Business Arising from the Minutes	
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a. Briefing on Mental Health by the Chair of Senate (L. Beagrie)	
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a. Spotlight on UAP Priority Areas: Priority Area 3	
9. Other Business	

M. Armstrong, Secretary

York University Senate

Consent Agenda

Consent agenda items are deemed to be approved or received unless, prior to the start of the meeting, one or more Senators ask that they be dealt with as regular business.

All of the items listed below are for approval.

10. Minutes of the Meeting of January 26, 2017 144
11. Changes to Degree Requirements for the MFA Program in Dance • School of the Arts, Media, Performance and Design / Faculty of Graduate Studies (Appendix E, page 96)
12. Changes to the Degree Requirements for the iBA Degree Type • Faculty of Liberal Arts & Professional Studies
13. Changes to the Degree Requirements for the BA Programs in Anthropology • Department of Anthropology • Faculty of Liberal Arts & Professional Studies (Appendix F, page 113)
14. Changes to the Degree Requirements for the BA Programs in Professional Writing and English & Professional Writing • Writing Department • Faculty of Liberal Arts & Professional Studies
15. Changes to the Degree Requirements for the PhD Program in Economics • Faculty of Liberal Arts & Professional Studies / Faculty of Graduate Studies (Appendix G, page 127)
16. Changes to the Requirements for the Diploma in Health Psychology • Faculty of Health / Faculty of Graduate Studies
17. Changes to the Degree Requirements for the PhD Program in Social Work • Faculty of Liberal Arts & Professional Studies / Faculty of Graduate Studies (Appendix H, page 135)

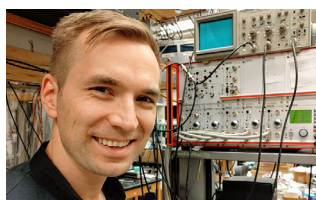
THIS IS EXCELLENCE KUDOS REPORT

JAN 2017–FEB 2017



Five York researchers have been awarded Social Sciences & Humanities Research Council of Canada (SSHRC) Connection Grants:

- Professor Margaret Beare, Osgoode Hall Law School
- Professor Eva Karpinski, LA&PS
- Professor Marcello Musto, LA&PS
- Professor Andrea O'Reilly, LA&PS
- Dean Noël Sturgeon, Faculty of Environmental Studies



York alumnus [Andrew Vorozcova](#) (BSc '05, MSc '05) is one of 72 Canadians shortlisted by the Canadian Space Agency for their astronaut selection process. All shortlisted candidates share in common an academic background in science or technology, outstanding qualities and skills, and excellent health.



Osgoode student [Geevith Rubakumar](#) won first place in the Ryerson Legal Innovation Zone challenge for founding the startup ParDONE.



Adjunct Chemistry professor [Michael Organ](#) is the recipient of the prestigious *Encyclopedia of Reagents for Organic Synthesis (HROS)* 2017 Best Reagent Award, in honour of his Pd-PEPPSI-IPent catalyst.

Ontario Access to Justice Challenge: THE FINAL PITCH

THIS IS EXCELLENCE KUDOS REPORT



York honorary degree recipient and [acclaimed Canadian opera and theatre director Robert Carsen](#) has been named one of five artists to receive an OPERA NEWS Award at a gala dinner hosted by the Metropolitan Opera Guild on April 9. The award recognizes distinguished achievement in the field of opera.



LAPS professor [Richard Leblanc](#) claimed the top spot on the series *Inside America's Boardroom's* Top 10 Episodes of 2016.

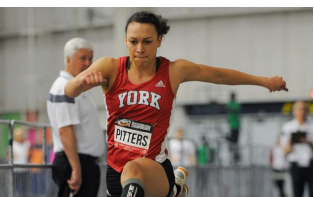


PhD student [Sabrina Scott](#) won the 2016 Youthline LGBT Youth Award for Outstanding Achievements in Post-Secondary Academic Environment.



At Schulich Research Day on January 26, Dean Dezsö J. Horváth presented the following [Dean's Impact Research Awards](#) in recognition of Schulich faculty members who have demonstrated excellence in research:

- Lifetime Achievement Award went to Christine Oliver, Professor and Henry J. Knowles Chair in Organizational Strategy
- Emerging Leader Award went to Associate Professor Charlene Zietsma



York Lions jumper [Holly Pitters](#) set a new school record in long jump and won the gold medal at the Can Am Classic in Windsor.



Lassonde professor [Hui Jiang](#) and his former PhD student Ossama Abdel-Hamid received the 2016 IEEE Signal Processing Society (SPS) Best Paper Award for their research on speech recognition software.



THIS IS EXCELLENCE KUDOS REPORT

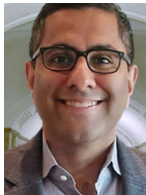


LAPS professor [Caroline Shenaz Hossein](#) was awarded the prestigious Helen Potter Award by the Association of Social Economics for her article "'Big Man' Politics in the Social Economy: A Case Study of Microfinance in Kingston, Jamaica." Named for economist Helen Potter, the award recognizes excellence in scholarship which confronts mainstream economics with literature that supports heterodox economic research.

APPOINTMENTS:



Faculty of Health professor [Shayna Rosenbaum](#) was appointed to the position of York Research Chair in December 2016 in recognition of her world-leading expertise on memory.



Osgoode professor [Aaron Dhir](#) was appointed Spring 2017 Justin D'Atri Visiting Professor of Law, Business and Society at Columbia Law School.



LAPS professor [Hassan Qudrat-Ullah](#) was appointed editor-in-chief of the *International Journal of Complexity in Applied Science and Technologies*.



Schulich professor [Douglas Cumming](#) was appointed editor-in-chief of the Journal of Corporate Finance.



Schulich alumna [Dr. Eileen de Villa](#) (MBA '03) was appointed Toronto's new Medical Officer of Health. Dr. de Villa also completed a certificate in health law at Osgoode.

Executive Committee – Report to Senate

At its meeting of February 16, 2017

The Executive Committee met on February 7, 2017 and makes this report to Senate for action and information.

FOR INFORMATION

1. Approval of Faculty Nominees for Membership on Senate Committees

In accordance with rule (Section III, C 2a) the Committee has approved the membership on the Sub-Committee on Honorary Degrees and Ceremonials of the following individual nominated by the Osgoode Hall Faculty Council:

Kate Sutherland, Associate Professor

Professor Sutherland's term begins immediately and ends June 30, 2019.

2. Remaining Senate Vacancies for 2017 – 2020 Terms

The Executive Committee continues to seek prospective candidates to fill two vacancies on the Tenure and Promotions Committee.

3. Bi-Annual Review of Senate Membership

Section B, 3 (Periodic Review and Publication of Senate Membership Reviews) stipulates that "Senate Executive shall review changes in structures, faculty complements and student enrolments every two years..." The Committee has embarked on the process of review in anticipation of presenting recommendations to Senate in February. Changes in Faculty Council allocations, if any, are statutory in nature and would involve a notice of motion to Senate at the first stage of revisions. It is anticipated that the first stage will occur in March. Faculty Councils have been notified that there may be changes in their allocation of seats.

4. Additions to the Pool of Honorary Degree Recipients

In a confidential report from the Sub-Committee, the Senate Executive received recommendations to add individuals to the pool of prospective recipients of honorary degrees. The Committee concurred with all of the recommendations and, as a result, six new candidates have been deemed eligible for honorary degrees.

The Sub-Committee is working to expand the pool of prospective honorary degree recipients, and it encourages Senators to submit nominations themselves while urging colleagues to do the same. It has advised the Executive Committee that it hopes to add ten new individuals this month and will do all that it can to expedite approvals. For its part, Senate Executive has agreed to facilitate prompt consideration.

Executive Committee – Report to Senate

The nomination process is not onerous. Nominators are asked to provide a brief summary of the nomination (no more than 100 words) along with a personal statement – a profile with concrete examples -- of about 500 words. Additionally, they are asked to arrange written expressions of support from within the University community. The University Secretariat is able to assist nominators as they go through the process.

Criteria applied by the Sub-Committee are

- eminence in scholarship or other walks of life
- extraordinary, distinguished service
- benefaction to the University
- contributions to society worthy of emulation by our graduates

The Sub-Committee has recently corresponded with the Deans, Principal and Faculty Council Chairs urging them to promote nominations and to institute confidential procedures at the unit and Faculty level to solicit and transmit the names of worthy individuals. Its members plan to promote nominations among their colleagues.

A premium is placed on candidates who reflect York's diversity, mission and values. The Sub-Committee would be especially grateful to receive nominations of women, indigenous people and minorities.

5. Faculty of Education Convocation Ceremonies

The Faculty of Education has proposed changes to its cohort groups given the changes to the Bachelor of Education degree program such that it is no longer necessary to differentiate between Concurrent and Consecutive Programs. The Faculty has also requested that all teacher candidates be listed alphabetically and together (including Ryerson - ECSR, PT Consecutive, Concurrent and Consecutive) rather than arranged by cohort. The Sub-Committee on Honorary Degrees and Ceremonials agreed that these changes were appropriate and should be instituted.

6. Faculty Council Membership Lists

On a recommendation from the University Secretariat the Committee has formally approved the membership lists of all Faculty Councils for 2016-2017.

Lesley Beagrie, Chair

SENATE COMMITTEE ON AWARDS

Report to Senate at its meeting of 16 February 2017

FOR INFORMATION

1. Report on Undergraduate Student Awards Distribution for 2015-2016

The Senate Committee on Awards receives annually from the Office of Student Financial Services (OSFS) a report on the disbursement of student awards for the previous fiscal year. A copy of the full report is attached. Table A provides an overview of funding and number of students receiving awards for 2014-15 and 2015-16.

Highlights for 2015-16 are:

- There was a significant increase in both funds disbursed (17.2%) and number of recipients (11.4%).
- The primary cause is the increase in the value of entrance scholarships, an increase of \$500 at each level plus the \$500 Student Life Award (SLA), and the extension of the SLA to applicants with averages from 75 to 79.9%.
- The increase was funded by additional central allocation, donor funding and reallocation of funds from bursaries, particularly the York Tuition Grant, and work/study programs.
- The largest factor in the decrease in disbursement amount and number of recipients of York-funded continuing student awards was the \$1.7 million decrease attributed to the discontinuation of the York Tuition Grant, which had been available to those not eligible for the Ontario Tuition Grant. These students are still eligible for other bursaries and there was an increase in the amount disbursed through the York Undergraduate Bursary. The number of recipients decreased but this may be attributable to need being met through the increased entrance scholarship.
- Government funding continues to decrease, as expected. The Queen Elizabeth II Aiming for the Top Scholarship saw the final two students in 2015-16; last year there were 63.
- Government funding for non-OSAP approved bridging programs decreased as they are in the final year of a contract with York. It is not yet known if these contracts will be extended.
- The overall decrease in government funded awards is driven by provincial funding directives and amounts and head counts change from year to year.
- Disbursements from endowments and donations increased 8.5% and the number of recipients by 6.2%. The full report notes a number of significant individual awards.

Going forward, without additional donor funding, the entrance scholarships are not sustainable and changes will be implemented to decrease the scholarships by \$500 except for students with a final admission average of 95%+ for the 2017-18 admission cycle. In the Toronto area, York will remain competitive. A Provost Award valued at \$500 - \$1,000 will be introduced for Ontario college and university transfer students who have completed the equivalent of at least one year of study. None of our competitors offer entrance awards to this cohort of applicants.

There are two significant changes to OSAP for 2017-18 – an increase in weekly loan thresholds and the introduction of the Ontario Student Grant (sometimes referred to as “free tuition”). It is expected that students whose parental income is \$50K or less will receive all provincial funding in the form of a

grant. It is anticipated that these changes will result in higher entitlements overall and result in lower demand on York's bursary program

The committee expressed concern about the focus on non-renewable entrance scholarships when students need funding over four years, as well as how changes to the OSAP definition of financial need will affect the number of students eligible to be considered for bursaries. Over the next three years Student Financial Services will track this cohort of entrance scholarship recipients and the funds which they access as continuing students.

The full Student Financial Services report is attached.

Robert Kenedy, Chair



REGISTRAR'S OFFICE
& STUDENT
FINANCIAL SERVICES

Bennett Centre for Student
Services
Suite W223
4700 Keele St.
Toronto ON
Canada M3J 1P3

yorku.ca/osfs

Memo

To: Senate Committee on Awards

From: Jillian Yeung Do, Director, Student Financial Services
Karen Warner, Manager Scholarships and Bursaries
Oana Alexandru, Senior Financial Analyst

CC: Carol Altília, University Registrar

Date: October 31, 2016

Re: 2015 - 2016 Undergraduate Award Disbursement Report

Overview

The purpose of this memo is to provide a summary of York University's undergraduate award disbursement for Fiscal 2015-16 (May 1, 2015 to April 30, 2016) versus Fiscal 2014-15 (May 1, 2014 to April 30, 2015).

Table A provides a summary of all awards and bursaries disbursed to York University undergraduate students (Keele and Glendon campuses combined); categorized by Funding Source (Figure 1) and Recipient Headcount (Figure 2). Data in Figure 1 and Figure 2 was obtained from the York University *Factbook*, which is published by York University's Office of Institutional Planning and Analysis ("OIPA").

Overall, the amount of Undergraduate Award funding disbursed to York University students *increased* in Fiscal 2015-16 (\$29,749,037) versus 2014-15 (\$25,388,544) which represents a 17.2% year over year spending change; with the number of recipients also increasing year over year by 11.4% (FW15-16: 24,885 vs. FW14-15: 22,331).

TABLE A: 2015-2016 Undergraduate Awards**Note 1****Figure 1 - Overview of Award and Bursary Funding (\$ Disbursed)**

Award Funding Category		2014-2015 (\$)	2015-2016 (\$)	Variance (\$)	YOY % Variance
York Funded	Entering Student Awards	\$5,660,305	\$10,884,705	\$5,224,400	92%
	Continuing Student Awards	\$11,709,804	\$10,835,989	(\$873,815)	-7.5%
Government Funded		\$2,208,608	\$1,723,904	(\$484,704)	-21.9%
Private Donations and Endowments		\$5,809,827	\$6,304,439	\$494,612	8.5%
TOTAL		\$25,388,544	\$29,749,037	\$4,360,493	17.2%

Figure 2 - Number of Students who Received Awards and Bursaries (Headcount #) Note 2

Award Funding Category		2014-2015 (Headcount)	2015-2016 (Headcount)	Variance (Headcount)	YOY % Variance
York Funded	Entering Student Awards	4,811	11,193	6,382	131.5%
	Continuing Student Awards	13,067	9,156	-3,911	-29.9%
Government Funded		989	858	-131	-13.2%
Private Donations and Endowments		3,464	3,678	214	6.2%
TOTAL		22,331	24,885	2,554	11.4%

Note 1 - Fiscal 14-15 and Fiscal 15-16 data was obtained by Student Financial Services from York University's Factbook data (published by the Office of Institutional Planning and Analysis)

Note 2 – Some students may have received more than one award and may be included in more than one category.

Summary of Year of Year Variances

York Funded – Entering Student Awards

York Funded Entering Student Awards	YOY Variance		Average YOY Impact of Award (\$) per Recipient		
	Fiscal 14-15 vs. Fiscal 15/16 YOY Variance (\$)	Fiscal 14-15 v.s. Fiscal 15-16 YOY Variance (%)	Fiscal 14-15 (Average) Award Disbursement per Recipient*	Fiscal 15-16 (Average) Award Disbursement per Recipient*	YOY Variance (\$)
Overall Spending (\$)	\$5,224,400	92%	\$1,177	\$972	-\$205
Overall Headcount (#)	6382	132%			

*Calculated as total spending in the Award Category for the academic year divided by the # of Students who Received this Award Category during the academic year

Overall, disbursement (spending) on **York Funded Entering Student Awards** *increased* year-over-year (Fiscal 14-15: \$5,660,305 vs. Fiscal 15-16: \$10,884,705), representing a year-over-year (“YOY”) spending variance of 92%.

On the basis of recipient headcount, there was a 132% (or 6,382 additional awards) *increase* on a year over year (“YOY” basis). That is, 4,811 domestic and international students received York Funded Entering Student Awards in Fiscal 14-15 vs. 11,193 students in Fiscal 15-16. It must be noted however that under the Enhanced Entrance Scholarship Program, eligible students receive a funding package which consists of **two distinct** awards which are the Automatic Entrance Scholarship (\$1,000 - \$3,500) which is applied to their student account **and** the Student Life Award (\$500) which is applied to their YU Card. With respect to **unique** recipients, the actual variance is an increase of 67% or +2,869 students (FW14-15: 4,263 students vs. FW15-16: 7,132 students). This increase is due to the extension of the Student Life Award to students admitted with averages between 75% - 79.9%.

The significant increase in funding disbursed under York Funded Entering Student Awards is attributed to the full launch of the Enhanced Entrance Scholarship Program for the Fall/Winter 2015-2016 admission cycle (soft launch occurred for the Winter 2015 admission cycle). This program targets 101 applicants (Ontario high school students and international students who completed the Canadian high school curriculum with admission averages of 80%+), and consists of:

- i) Increase in entrance scholarship values - a \$500 increase to each “admit tier” (e.g. \$1,000 for students admitted with final average of 80% to 84.9%, \$1,500 for students admitted with final average of 85% to 89.9%, \$2,500 for students admitted with final average of 90% to 94.9% and \$3,500 for students admitted with a final average of 95%+). This resulted in an overall spending year-over-year increase in the Other Entrance Scholarships and Renewable Entrance Scholarships categories of +46% or \$2.1M (Fiscal 14-15: \$4,593,061 vs. Fiscal 15-16: \$6,694,677)
- ii) Introduction of the Student Life Award (SLA) - \$500 applied to students’ YU card. The SLA was coupled with the above indicated scholarship and was extended to 101 applicants with averages between 75% – 79.9% thus giving York University a competitive advantage since these students would not normally qualify for awards from other institutions. This resulted in an overall spending year-over-year increase in the Entrance Award category of \$3.3M (Fiscal 14-15: \$81,000 vs. Fiscal 15-16: \$3,369,908)

The Enhanced Entrance Scholarship Program continues to have a positive impact on conversion rates. Of the domestic students eligible for the York Funded Entrance Awards, it was noted that there was a YOY increase in Fall/Winter 2015-2016 admits of 2.6% or 87 students (FW14-15: 3382 students vs. FW15-16: 3469 students). In addition, there was a 22% or 59 students (FW14-15: 263 students vs. FW15-16: 322 students) increase in the number of international students eligible for the York Funded Entrance Awards. The additional expenditures for the Enhanced Entrance Scholarship Program were financed by an additional allocation of \$1.6M from Finance and \$1.5M in donor funding, coupled with the reallocation of funds from bursaries and Work/Study programs.

It should be noted that increases in other entrance scholarships also contributed to the overall growth of the spending disbursed under this category. The Faculty of Science Entrance Scholarship and the Lassonde Entrance Scholarship saw a combined increase of 35% or 40 heads (FW14-15: 115 students vs. FW15-16: 155 students). This resulted in an \$80K increase in spending (Fiscal 14-15: \$230,000 vs. Fiscal 15-16: \$310,000). These scholarships are valued at \$2,000 and are awarded to domestic and international students admitted to these two faculties with an admission average of 90%+. The York University President's Scholarship which is a renewable entrance scholarship awarded to the top 18 students with the highest admit average across the undergraduate faculties, increased by \$38K (FW14-15: \$248,400 or 46 students vs. FW15-16: \$286,200 or 53 students); this increase is attributed to a higher rate of renewability.

These increases are offset by the elimination of two awards that were given in Fiscal 14-15 but discontinued for Fiscal 15-16; namely the Engineering Supplemental Entrance Scholarship (\$104K) which was offered for a limited time to mark the launch of the Lassonde School of Engineering and the Undergraduate Entrance Bursary (\$207K) which was discontinued as a result of the increased upfront support provided through the scholarship program.

In short, spending and headcount recipients for York Funded – Entering Student Awards has increased substantially in Fiscal 15-16 versus Fiscal 14-15 as expected.

York Funded - Continuing Student Awards

York Funded Continuing Student Awards	YOY Variance		Average YOY Impact of Award (\$) per Recipient		
	Fiscal 14-15 vs. Fiscal 15/16 YOY Variance (\$)	Fiscal 14-15 v.s. Fiscal 15-16 YOY Variance (%)	Fiscal 14-15 (Average) Award Disbursement per Recipient*	Fiscal 15-16 (Average) Award Disbursement per Recipient*	YOY Variance (\$)
Overall Spending (\$)	(\$873,815)	-8%	\$896	\$1,183	\$287
Overall Headcount (#)	-3911	-30%			

*Calculated as total spending in the Award Category for the academic year divided by the # of Students who Received this Award Category during the academic year

Overall, disbursement (spending) on **York Funded Continuing Student Awards** *decreased* by -\$874K on a year-over-year basis (Fiscal 14-15: \$11,709,804 vs. Fiscal 15-16: \$10,835,989); representing a YOY spending variance of -7.5%.

On the basis of recipient headcount for York Funded Continuing Student Awards, there was a -29.9% YOY *decrease* in students (-3,911 awards/students) receiving awards in this category (Fiscal 14-15: 13,067 students vs. Fiscal 15-16: 9,156 students).

Despite the fact that YOY disbursement (spending) *decreased* and YOY headcounts *decreased*, the YOY average award disbursed per student *increased* by approximately \$287 per recipient.

The \$874K *decrease* in spending on York-Funded Continuing Student Awards is largely attributed to a YOY *decrease* of \$1.25M in funding disbursed under the Undergraduate Bursary Program category (Fiscal 14-15: \$9,237,451 vs. Fiscal 15-16: \$7,988,455). Factors that contributed to this decrease include a YOY spending *decrease* of -\$1.7M attributed to the discontinuation of the York Tuition Grant in FW15-16; a spending *decrease* of -\$40K for the York/Sheridan Bursary (Fiscal 14-15: \$466,373 vs. Fiscal 15-16: \$426,439) attributed to funding being reallocated to support the Enhanced Entrance Scholarship Program and a spending *decrease* of -\$55K for the Schulich Bursary (Fiscal 14-15: \$192,603 vs. Fiscal 15-16: \$137,280) due to a -\$152K *decrease* in TSA funding allocated to Schulich in Fiscal 14-15 vs. Fiscal 15-16.

There were a number of bursary programs that experienced YOY increases such as the York University Undergraduate Bursary which saw a spending *increase* of \$326K (Fiscal 14-15: \$3,803,790 vs. Fiscal 15-16: \$4,130,456). It should be noted that while spending *increased*, the head count *decreased* (FW14-15: 6,960 students vs. FW15-16: 4,890 students). This can be attributed to a lower number of students with demonstrated need (possibly as a result of receiving more funding at the point of admission) and a change in bursary assessment policy whereby funding is allocated primarily to OSAP students who have “unmet need” as defined by the MTCU in compliance with our Student Access Guarantee obligation. There was a spending *increase* of \$28K for the York University Crown Ward Bursary (Fiscal 14-15: \$72,539 vs. Fiscal 15-16: \$100,862). The value of these bursaries and the number of recipients fluctuates as eligible students are identified through the OSAP application. Lastly, there was a spending *increase* of \$197K for the Osgoode Bursary (Fiscal 14-15: \$303,858 vs. Fiscal 15-16: \$500,937). In recognition of Osgoode’s 50th year at York University, Osgoode created the Osgoode/York 50th Bursary which is comprised of 1,000 medium need bursaries at \$5,000 each to be distributed over 2 years. The first disbursement occurred during the FW15-16 academic year and the remaining bursary funds will be expended in the FW16-17 academic year.

The overall losses under the Undergraduate Bursary Program category were offset by a year-over-year spending *increase* of \$83K under the Continuing Student Scholarship (Fiscal 14-15: \$793,118 vs. Fiscal 15-16: \$875,926) which is due to a higher number of eligible students (FW14-15: 1289 students vs. FW15-16: 1,427 students). This merit based scholarship is automatically awarded to continuing students with GPA of 8.0 and higher. We expect to see continued increase in FW16-17 due to changes to the Enhanced Entrance Scholarship Program which is now only renewable for those admitted with 95%+.

Additionally, there was a spending *increase* of \$263K in funding disbursed under Other In Course Scholarships. This is attributed to an increase of \$104K caused by fluctuation in awards disbursed YOY. Lastly, \$159K of the additional funding disbursed is attributed to higher YOY disbursements in some specific

awards (i.e. LAPS International Study Abroad increased by \$37K, York International Mobility Award increased by \$56K, and the Osgoode Internship Award increased by \$66K).

In addition, there was a spending *increase* of \$30K in disbursements in the Service Bursary Program category (Fiscal 14-15: \$59,134 vs., Fiscal 15-16: \$89,353).

Spending remained stable for the Renewable Entrance Scholarship renewals (Fiscal 14-15: \$1,026,500 vs. Fiscal 15-16: \$1,022,000); we expect to see a significant decrease in FW16-17 due to changes to entrance scholarship program.

In short, the overall decrease in spending on York Funded Continuing Student Awards was largely due to the strategic decision to discontinue the York Tuition Grant.

Government Funded Awards

Government Funded	YOY Variance		Average YOY Impact of Award (\$) per Recipient		
	Fiscal 14-15 vs. Fiscal 15/16 YOY Variance (\$)	Fiscal 14-15 v.s. Fiscal 15-16 YOY Variance (%)	Fiscal 14-15 (Average) Award Disbursement per Recipient*	Fiscal 15-16 (Average) Award Disbursement per Recipient*	YOY Variance (\$)
Overall Spending (\$)	(\$484,704) ↓	-22% ↓	\$2,233	\$2,009	-\$224 ↓
Overall Headcount (#)	-131 ↓	-13% ↓			

*Calculated as total spending in the Award Category for the academic year divided by the # of Students who Received this Award Category during the academic year

Overall, disbursement (spending) on **Government Funded Awards** decreased by -\$485K on a YOY-basis (Fiscal 14-15: \$2,208,608 vs. Fiscal 15-16: \$1,723,904); or a spending variance of -21.9%.

On the basis of recipient headcount for Government Funded Awards, there was a -13.2% decrease (-131 students) receiving awards in this category (Fiscal 14-15: 989 students vs. Fiscal 15-16: 858 students).

When analyzing the average award disbursement per recipient, the YOY change was approximately -\$224 less per student.

Overall, the year over year decrease in the Government Funded Award category is due to the cancellation of the Queen Elizabeth II Aiming for Top Scholarship (QEII A4T). Fiscal 14-15 was the final year for any significant disbursement of the QEII A4T which was renewable award, as the majority of QEII A4T recipients completed their undergraduate degrees in that year. As such, there was a YOY decrease in disbursement of the QEII A4T award of -\$164K (FW14-15: \$171,372 for 63 recipients; FW15-16: \$7,000 for 2 recipients).

In addition, the overall decrease in the disbursements of Government Funded Awards is also attributed to the decrease in spending in the *Internationally Educated Professionals Bridging Program (IEP)* and the *Ontario Bridging Participant Assistance Program (OBPA)*. These programs provide financial assistance to students with financial need enrolled in non-OSAP approved bridge training programs. This program is in the final year of its contract which resulted in a lower number of new admits and consequently, lower YOY spending. The IEP saw a decrease of -\$199K and -53 students (FW14-15: \$365,518 for 207 students vs. FW15-16: \$166,911 for 154 students). The OBPA saw a decrease of -\$70K and -23 students (FW14-15: \$198,667 for 137 students vs. FW15-16: \$129,015 for 114 students). Unless the government elects to extend the contracts for these programs, Fiscal 16-17 will reflect continued decreases in spending and recipients.

There was a very slight decrease in spending in the *Bursary for Students with Disabilities*. This bursary assists students who have a permanent disability and demonstrated financial-need, to meet their disability-related educational costs. This is a needs-based program for which students need to apply and meet eligibility requirements. Therefore disbursement/recipient levels fluctuate based on the yearly applicant pool. The YOY spending decrease was -\$17K (FW14-15: \$825,540 or 361 students vs. FW15-16: \$808,566 or 354 students).

Also included in the overall disbursements of Government Funded Awards are the *First Generation Bursaries* and the *Aboriginal Student Bursary* programs. York University receives an annual provincial allocation which is fully expended each year. The cumulative disbursement levels for both programs remained stable (FW14-15: \$241,260 or 122 students vs. FW15-16: \$239,957 or 151 students).

Lastly, there was a YOY decrease of -\$34K in funding disbursed from the CUSEP Award (FW14-15: \$130,200 vs. FW15-16: \$96,400). This award provides financial support to incoming exchange students.

In short, the overall YOY decrease in spending/disbursement on Government Funded Awards is driven by the funding directive by the provincial government (MTCU) vis-à-vis the applicant pool of students who qualify for these government awards. Therefore, the amount (\$) and headcount variances can change from year to year; and are not explicitly tied to York University's scholarship strategy.

Awards from Private Donations and Endowments

Endowments and Donations	YOY Variance		Average YOY Impact of Award (\$) per Recipient		
	Fiscal 14-15 vs. Fiscal 15/16 YOY Variance (\$)	Fiscal 14-15 v.s. Fiscal 15-16 YOY Variance (%)	Fiscal 14-15 (Average) Award Disbursement per Recipient*	Fiscal 15-16 (Average) Award Disbursement per Recipient*	YOY Variance (\$)
Overall Spending (\$)	\$494,612	9%	\$1,677	\$1,714	\$37
Overall Headcount (#)	214	6%			

*Calculated as total spending in the Award Category for the academic year divided by the # of Students who Received this Award Category during the academic year

Overall, disbursement (spending) on Private Donations and Endowments *increased* on a year-over-year basis (Fiscal 14-15: \$5,809,827 vs. Fiscal 15-16: \$6,304,439); representing a YOY disbursement (spending) variance of +8.5%.

On the basis of recipient headcount, there was a year over year +6.2% *increase* (of 214 students) receiving awards in this category (Fiscal 14-15: 3,464 students vs. Fiscal 15-16: 3,678 students).

The overall YOY spending *increased* as did the YOY number of recipients, allowing *more* funding to be disbursed to *more* recipients; consequently the average award value received per recipient in Fiscal 15-16 increased by an average of +\$37 per recipient.

There were a number of individual awards and internships that saw increases in year-over-year spending resulting in an overall increase of +\$368K. These include (but are not limited to): the *Lassonde Scholarship* (YOY disbursement increase of +\$145K), the *York University Bursary* (YOY disbursement increase of +\$100K), the *York University Awards of Achievement* (YOY disbursement increase of +\$34K), the *Brazilian Ball Fine Arts Award* (YOY disbursement increase of +\$33K), the *Harley D. Hallet Renewable Entrance Scholarship* (YOY disbursement increase of +\$30K), the *Faculty of Fine Arts Program Specific Internship* (YOY disbursement increase of +\$20K), *Schulich Leader Scholarship* (YOY disbursement increase of +\$20K), *Wendy Babcock Social Justice Award* (YOY disbursement increase of +\$20K), *Franc and Mary Joubin Bursary Fund* (YOY disbursement increase of +\$19K), the *York University Undergraduate Award* (YOY disbursement increase of +\$19K), the *YUFA Transition Year Bursary* (YOY disbursement increase of +\$12K), *Students Centennial Bursary Fund* (YOY disbursement increase of +\$11K) and the *Royal Bank Emergency Bursary Fund* (YOY disbursement increase of +\$11K).

There were also some significant decreases that should be noted. These include the *Canadian Friends of Hebrew University Award* (YOY disbursement decrease of -\$74K) and the *Ethel Harris Entrance Scholarship at Glendon* (YOY disbursement decrease of -\$35K).

The remaining increased spending in FW15-16 (+\$126K) is due to variances in the number of awards disbursed year over year a direct result in the increase in OTO and/or termed awards established in recent years.

Going forward, private donations and endowments will continue to play an important role in filling the funding gap for students as the university increasingly allocates operating funds to support strategic enrolment initiatives.

Conclusion

Overall disbursement (spending) increased on a YOY fiscal basis (Fiscal 14-15: \$25,388,544 vs. Fiscal 15-16: \$29,749,037), representing a YOY spending variance of 17.2%.

On the basis of recipient headcount, there was an 11.4% increase (of 2,554 students) receiving awards (Fiscal 14-15: 22,331 students vs. Fiscal 15-16: 24,885 students).

The overall YOY average of the award per student remained relatively constant, with an average award increase of approximately +\$58 per student (average award per recipient in F14-15 = \$1,137 vs. F15-16 = \$1,195).

Moving forward there will be continued strategic planning to determine how scholarships can be best leveraged to both provide students with the financial assistance they need and meet the institutions enrolment targets especially in light of the new Net Tuition Billing initiative for all post-secondary institutions that is being mandated by the Ministry of Advanced Education and Skills Development (MAESD), formerly the Ministry of Training, Colleges and Universities (MTCU).

New Developments

The significant increase in funding disbursed under York Funded Entering Student Awards was financed by an additional allocation of \$1.6M from Finance and \$1.5M in private donor funding coupled with the reallocation of funds from bursaries and Work/Study programs. Without additional donor funding, this program is not sustainable for the long term. After careful analysis of competitor scholarship values, a proposal was approved by the Provost that will see the implementation of the following changes to the entrance scholarship program for the 2017 -2018 admission cycle:

- i) Decrease in entrance scholarship values - a \$500 decrease to each “admit tier” with the exception of the 95%+ admits (e.g. \$500 for students admitted with final average of 80% to 84.9%, \$1,000 for students admitted with final average of 85% to 89.9%, \$2,000 for students admitted with final average of 90% to 94.9% and \$3,500 for students admitted with a final average of 95%+). The scholarships will continue to be coupled with the Student Life Award (SLA) for those students who accept their offer of admission by the date indicated in their offer letters. The SLA will continue to be extended to 101 applicants with averages between 75% - 79.9%.
- ii) Introduction of the Provost Award valued at \$500 - \$1,000; will replace the current Provost Scholarship. This unique award will be given to Ontario College and University Transfer students who have completed at least one year of full time study or equivalent at their previous institution and have been admitted to an undergraduate degree program at York University with a minimum average of 75% from college and/or 70% from university. This new award is expected to give York University a competitive advantage as none of our competitors offer entrance awards to this cohort of applicants.

**2015/16 Undergraduate Awards - Table
A for Fact Book**

level Undergrad

York Funded	Entering Student Awards	Entrance Award	\$3,593,828
		Other Entrance Scholarships	\$6,676,177
		President's Scholarship	\$286,200
		Renewable Entrance Scholarship	\$18,500
		Science & Engineering Entrance Scholarship	\$310,000
	Continuing Student Awards	Continuing Student Scholarship	\$878,676
		Other In-Course Scholarships	\$857,505
		Renewable Entrance Scholarship-Renewals	\$1,022,000
		Service Bursary Program	\$89,353
		Undergrad Bursary Program	\$7,988,455
Government Funded		First Generation Bursary	\$180,557
		Government Funded Programs	\$727,781
		OSAP Disability Bursary	\$808,566
		Queen Elizabeth II Aiming for Top Scholarship Renewal	\$7,000
Private Donations		Endowments and Annual Donations	\$6,304,439
All			\$29,749,037

2015/16 Undergraduate Awards - Table
A for Fact Book

level Undergrad

			Home Faculty											All
				AP	ED	ES	FA	GL	HH	LE	LW	SB	SC	
York Funded	Entering Student Awards	Entrance Award	\$0	\$1,444,736	\$500	\$28,784	\$279,764	\$253,602	\$700,827	\$253,722	\$86,420	\$213,083	\$332,389	\$3,593,828
		Other Entrance Scholarships	\$0	\$1,912,767	\$1,500	\$37,000	\$778,000	\$647,435	\$868,237	\$506,000	\$0	\$1,107,500	\$817,739	\$6,676,177
		President's Scholarship	\$0	\$75,600	\$0	\$10,800	\$43,200	\$32,400	\$27,000	\$10,800	\$0	\$54,000	\$32,400	\$286,200
		Renewable Entrance Scholarship	\$0	\$0	\$0	\$0	\$0	\$4,000	\$5,000	\$0	\$0	\$4,000	\$5,500	\$18,500
		Science & Engineering Entrance Scholarship	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80,000	\$0	\$0	\$230,000	\$310,000
	Continuing Student Awards	Continuing Student Scholarship	\$0	\$275,572	\$42,804	\$15,012	\$46,152	\$43,318	\$320,074	\$20,724	\$0	\$33,876	\$81,144	\$878,676
		Other In-Course Scholarships	\$600	\$297,120	\$25,803	\$10,900	\$29,050	\$64,850	\$69,804	\$98,461	\$221,928	\$24,537	\$14,451	\$857,505
		Renewable Entrance Scholarship-Renewals	\$0	\$165,000	\$17,000	\$5,500	\$59,500	\$79,000	\$185,000	\$25,000	\$2,000	\$252,000	\$232,000	\$1,022,000
		Service Bursary Program	\$0	\$55,497	\$1,500	\$0	\$0	\$29,750	\$2,607	\$0	\$0	\$0	\$0	\$89,353
		Undergrad Bursary Program	\$0	\$2,105,877	\$114,783	\$32,058	\$601,865	\$139,974	\$804,208	\$658,192	\$2,884,690	\$517,669	\$129,139	\$7,988,455
Government Funded		First Generation Bursary	\$0	\$50,111	\$0	\$1,752	\$9,264	\$4,008	\$19,658	\$45,807	\$0	\$44,949	\$5,008	\$180,557
		Government Funded Programs	\$0	\$369,446	\$15,540	\$1,845	\$1,740	\$50,875	\$46,760	\$41,375	\$28,800	\$14,750	\$156,650	\$727,781
		OSAP Disability Bursary	\$0	\$364,311	\$26,702	\$15,870	\$48,947	\$58,782	\$203,458	\$15,975	\$20,550	\$7,366	\$46,605	\$808,566
		Queen Elizabeth II Aiming for Top Scholarship Renewal	\$0	\$3,500	\$0	\$0	\$0	\$0	\$3,500	\$0	\$0	\$0	\$0	\$7,000
Private Donations		Endowments and Annual Donations	\$500	\$1,456,061	\$188,185	\$85,739	\$600,888	\$424,081	\$535,943	\$677,562	\$1,501,937	\$509,554	\$323,989	\$6,304,439
All			\$1,100	\$8,575,597	\$434,318	\$245,261	\$2,498,370	\$1,832,076	\$3,792,076	\$2,433,618	\$4,746,325	\$2,783,284	\$2,407,013	\$29,749,037

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2015/16 Undergraduate Awards - Table
A for Fact Book

level Undergrad

			Home Faculty											All
			heads	AP heads	ED heads	ES heads	FA heads	GL heads	HH heads	LE heads	LW heads	SB heads	SC heads	heads
York Funded	Entering Student Awards	Entrance Award	0	2749	1	58	557	513	1372	512	8	408	667	6845
		Other Entrance Scholarships	0	1426	1	28	446	369	613	346	0	405	498	4132
		President's Scholarship	0	14	0	2	8	6	5	2	0	10	6	53
		Renewable Entrance Scholarship	0	0	0	0	0	1	3	0	0	1	3	8
		Science & Engineering Entrance Scholarship	0	0	0	0	0	0	0	40	0	0	115	155
	Continuing Student Awards	Continuing Student Scholarship	0	498	67	26	79	67	477	32	0	54	127	1427
		Other In-Course Scholarships	4	476	39	11	42	90	57	58	80	26	18	901
		Renewable Entrance Scholarship-Renewals	0	105	9	6	30	45	117	13	1	103	122	551
		Service Bursary Program	0	40	2	0	0	56	1	0	0	0	0	99
		Undergrad Bursary Program	0	2536	139	50	374	291	1214	423	493	415	243	6178
Government Funded		First Generation Bursary	0	37	0	1	7	4	19	23	0	25	4	120
		Government Funded Programs	0	294	9	1	1	26	10	7	4	3	27	382
		OSAP Disability Bursary	0	166	10	8	16	31	85	8	3	5	22	354
		Queen Elizabeth II Aiming for Top Scholarship Renewal	0	1	0	0	0	0	1	0	0	0	0	2
Private Donations		Endowments and Annual Donations	1	1093	143	40	387	354	365	181	792	174	148	3678
All			5	9435	420	231	1947	1853	4339	1645	1381	1629	2000	24885

Academic Standards, Curriculum and Pedagogy Committee Report to Senate

At its meeting of 16 February 2017

For Action (Unless otherwise stated, all action items are effective FW 2017-2018)

Major Modifications

1. Establishment of the Cross-Disciplinary Bergeron Entrepreneurs in Science and Technology (BEST) Certificate in Technology Entrepreneurship • Lassonde School of Engineering

ASCP recommends that Senate establish the Cross-Disciplinary Bergeron Entrepreneurs in Science and Technology (BEST) Certificate in Technology Entrepreneurship, housed in the Lassonde School of Engineering.

Rationale

As the detailed and thorough proposal (Appendix A) elaborates, the Bergeron Entrepreneurs in Science & Technology (BEST) Certificate integrates technology, law and business into creative problem-solving and innovation and is designed to teach, promote, focus and recognize student entrepreneurial skills and knowledge. The BEST Certificate incorporates multidisciplinary courses and experiential opportunities from Lassonde, the Schulich School of Business, the Faculty of Liberal Arts & Professional Studies and Osgoode Hall Law School that collectively teach the essential entrepreneurship skills across eight separate themes. The certificate will integrate a formal academic program in entrepreneurship for students seeking options to enhance their career opportunities. Drawing on the strength of the University's business, law, engineering and communications studies programs, York is uniquely positioned to offer this innovative credential which will, in turn, contribute to the brand of Lassonde as an entrepreneurial engineering school.

Initially the Certificate will be an option for students in the BEng, BSc and BA programs housed in the Lassonde School of Engineering; there are separate and distinct requirements for BEng students and for BSc/BA students. It is planned to later expand the certificate to students in other Faculties through the addition of new courses accessible to students outside of the School of Engineering.

Very detailed learning outcomes have been articulated for the certificate, complemented by a matrix illustrating the alignment between the requirements and the achievement of the learning outcomes. The Senate committee confirmed that the requirements of the certificate meet the Senate criteria for cross-disciplinary certificates. As required, statements of support and confirmation of resources have been provided by the

Academic Standards, Curriculum and Pedagogy Committee Report to Senate

contributing departments/Faculties, as well as the Dean and the Provost. ASCP is pleased to recommend the approval of the innovative new certificate.

Approvals: Lassonde Faculty Council 6 December 2017 • ASCP 8 February 2017 • APPRC Concurrence 9 February 2017

2. Establishment of a 90-credit Degree Option in and Changes to Degree Requirements for the BA programs in Educational Studies • Faculty of Education

ASCP recommends that Senate approve:

- the establishment of a 90-credit degree option within the BA program in Educational Studies (delayed-entry); and
- minor changes to the degree requirements of the existing BA programs in Educational Studies as set out in the proposal attached as Appendix B.

Rationale

The BA in Educational Studies - distinct from the BEd - provides foundational knowledge of the field of education, outside of the teacher certification construct, and enables the development of skills to equip graduates for career opportunities in other, non-certified, teaching contexts (e.g., Libraries, in recreation, instructors, community workers, etc.). The program was launched in 2015-2016, with Honours BA and Honours Minor degree options. Early experience has shown that students are interested in a 90-credit option, either to follow with the BEd degree afterwards or be eligible to continue in and graduate with the BA degree.

The learning outcomes and requirement mapping for the 90-credit option have been completed as required. As the courses supporting the BA are among the existing curriculum for the Honours and Minor programs, adding the new option is resource neutral. The 90-credit degree option will be offered only as a delayed-entry program for students in the Honours program in Educational Studies who are either unable to continue in the Honours program, or who opt to graduate with a 90-credit degree instead.

The changes to the degree requirements are of a clarifying nature to better distinguish the courses that support the separate BA and the BEd programs; the number of credit requirements is not changing.

Approvals: Education Faculty Council February 2017 • ASCP 8 February 2017

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3. Changes to Admission Requirements for Masters Programs • Schulich School of Business / Faculty of Graduate Studies

ASCP recommends that Senate approve changes to the admission requirements for the following Masters programs as set out in Appendix C:

MBA, including MBA/MA and MBA / Master of Fine Arts dual credential programs
MBA/JD
International MBA
Master of Accounting (MAcc)
Master of Finance (MFIN)
Master of Real Estate and Infrastructure (MREI)
Master of Management (MMGT)

Rationale

Within the context of continuous improvement, the Masters programs housed in the Schulich School of Business recently revisited their standards for admission and, in some cases, the provision of advanced standing for prior education. The proposed changes to the admission requirements have been subject to broad and extensive consultations within the School.

Detailed rationales for the individual changes are articulated in the proposal attached in Appendix C. In sum, the changes broaden the requirements to reflect developments / trends within post-secondary education and / or the industry relevant to the degree program. Noting the thorough review and completeness of the documentation, ASCP supports the proposed revisions.

Approvals: FGS Faculty Council 5 January 2017 • ASCP 8 February 2017

4. Changes to the General Education Requirements for BA Programs in the Faculty of Science • Faculty of Science

ASCP recommends that Senate approve a change in the General Education requirements for BA programs housed in the Faculty of Science, as set out in Appendix D.

Rationale

The proposed change will more closely align the General Education requirements for BA programs in the Faculty of Science with those in the Faculty of Liberal Arts & Professional Studies. Just two departments in the Faculty of Science house BA programs - Science & Technology and Mathematics & Statistics.

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Prompting the change is a series of program revisions being undertaken in Mathematics & Statistics that have identified the need to have the broader general education humanities requirement in LA&PS to support the learning outcomes of the Mathematics program. The Senate Committee supports the shift to greater consistency in requirements across Faculties for the clarity afforded students.

Approvals: Science Faculty Council December 2016 • ASCP 8 February 2017

Consent Agenda

5. Changes to Degree Requirements for the MFA Program in Dance • School of the Arts, Media, Performance and Design / Faculty of Graduate Studies

ASCP recommends that Senate approve the following changes to the degree requirements for the Master of Fine Arts program in Dance:

- Delete the field of Dance Dramaturgy
- Change the remaining field of Contemporary Choreography to “Choreography/ Collaboration / Creation”
- Replace required courses related to the field of Dance Dramaturgy with required courses in support of the revised choreography field learning outcomes (credits totals remain the same at 18)
- Articulation of the timeline for the oral examination at the end of a student's fifth term

Rationale

The full proposal is attached as Appendix E. Student interest in dance dramaturgy has been consistently low, with students favouring the focus on choreography. Though the interest lies with choreography, students have expressed calls for the integration of digital technology in live performance. The proposed changes to the degree requirements respond to these realities, keep the program current and of interest to students.

The mapping of the degree requirements to the program learning outcomes has been updated as required.

Approvals: FGS Faculty Council 1 December 2016 • ASCP 25 January 2017

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6. Changes to the Degree Requirements for the iBA Degree Type • Faculty of Liberal Arts & Professional Studies

ASCP recommends that Senate approve revisions to the requirements for the iBA degree housed in the Faculty of Liberal Arts & Professional Studies to permit major courses to count towards meeting the internationally-oriented credit requirement.

Rationale

At present, the internationally-oriented credit requirements of the iBA are: at least 9 credits of internationally-oriented courses chosen outside the major. The change would be to permit the credits to be completed from a list of pre-approved courses that can be within the student's major program. A review of the iBA requirements, led by the Associate Dean, Global & Community Engagement, resulted in the conclusion that students will become better prepared in their field and will be able to apply the principles of globalization within their major. Additionally, it is thought that by allowing students to take additional internationally-oriented courses within their major, more students will be attracted to the iBA degree and retention in the various programs will increase.

Approvals: LA&PS Faculty Council 8 December 2016 • ASCP 25 January 2017

7. Changes to the Degree Requirements for the BA Programs in Anthropology • Department of Anthropology • Faculty of Liberal Arts & Professional Studies

ASCP recommends that Senate approve minor changes to the degree requirements for the BA programs in Anthropology as set out in the proposal attached as Appendix F.

Rationale

In the current degree structure, students do not commence the program until second year, and hence must take all 42 credits in their second to fourth years (54 credits in the case of our Specialized Honours degree). This is frustrating for direct entry majors who cannot immediately begin their program, some of whom opt for other programs as a result. The heavy weighting of credits in the final years also makes it very difficult for students to plan a double unlinked major (84 of 90 available credits in the second through fourth years). The proposed change in course requirements will allow direct entry at the first year for some students.

The mapping of the revised requirements to the Anthropology program learning outcomes was completed as required.

Approvals: LA&PS Faculty Council 8 December 2016 • ASCP 25 January 2017

Academic Standards, Curriculum and Pedagogy Committee Report to Senate

8. Changes to the Degree Requirements for the BA Programs in Professional Writing and English & Professional Writing • Writing Department • Faculty of Liberal Arts & Professional Studies

ASCP recommends that Senate approve the following changes to the requirements for the Professional Writing programs housed in the Writing Department, LA&PS:

- Reduction in the total number of major credits from 51 to 48 and the elimination of the requirement to specialize in a single program stream at the third and fourth-year levels, permitting instead completion of upper-level course work in two or more areas of the program for the Honours BA program in Professional Writing; and
- elimination of the requirement to specialize in a single program stream at the third and fourth-year levels, permitting instead completion of upper-level course work in two or more areas of the program for the Specialized Honours BA program in English and Professional Writing.

Rationale

The proposed changes provide graduates with more flexibility as they leave the program. The current programs' frameworks require unnecessary specialization. Recent graduates have told the program that they needed experience with more areas of writing in order to be competitive in their employment searches. The revised requirements will promote familiarity with and competence in a wider variety of writing genres and, in turn, support the achievement of the program learning outcomes. Flexibility will also be increased for students in the Honours program in Professional Writing by the small reduction in the number of required credits. The number of major credits for the Specialized Honours program in English and Professional Writing is remaining the same at 78 credits.

Approvals: LA&PS Faculty Council 8 December 2016 • ASCP 25 January 2017

9. Changes to the Degree Requirements for the PhD Program in Economics • Faculty of Liberal Arts & Professional Studies / Faculty of Graduate Studies

ASCP recommends that Senate approve the following changes to the requirements for the PhD program in Economics:

- eliminate the field comprehensive exam
- move the Econometrics exam from Year 2 term 3 to Year 1 term 3
- move Econ7110 from year 2 term 2 to year 2 term 1
- add requirement of passing draft of paper comprehensive exam in Year 2 term 2
- move paper/presentation comprehensive exam from Year 3 November to Year 3 September

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Rationale

The full proposal is attached as Appendix G. The main objective of the proposed program changes is to have PhD students begin their research on their dissertation at an earlier stage of their program. The current structure of the program essentially only allows students to first commit heavily on their research during early July of the second year. After consultation and discussion, the graduate program anticipates that the proposed changes will allow students an earlier start on their research without compromising on the course work and training leading up to their research. It is hoped the changes will also lead to earlier PhD completion times.

Approvals: FGS Faculty Council 1 December 2016 • ASCP 25 January 2017

10. Changes to the Requirements for the Diploma in Health Psychology • Faculty of Health / Faculty of Graduate Studies

ASCP recommends that Senate approve the following changes to the requirements for the Diploma in Health Psychology housed in the Faculty of Health:

- Replace the required not-for-credit weekly seminar with two 1.5 credit courses: PSYC 6456 1.5/KAHS 6456 1.5 and PSYC 6457 1.5/KAHS 6457 1.5
- Eliminate the required rotation in a health psychology setting for students in the in the Adult Clinical Psychology and Clinical Developmental Psychology Areas during their clinical internship year.

Rationale

Many students commence the diploma requirements by taking one or two years of the not-for-credit seminar but do not complete the other diploma requirements. It is important that they receive credit for their participation in this valuable learning and professional development experience. Converting the seminar into two 1.5 credit courses will ensure that outcome is achieved.

Regarding the elimination of the internship requirement, the program has noted that because it is essentially a research-intensive program, clinical outcomes have not been specified as a concrete learning expectation. Eliminating the requirement therefore will have no impact on the achievement of graduate diploma learning outcomes/objectives. Rather, it will “level the playing field” for clinical and clinical developmental psychology students who, to date, have had to complete more requirements than other students to obtain the same diploma. Additionally, since the clinical and clinical developmental psychology students must compete for a limited number of internship spots through the Internship Matching Program administered by the Association of Psychology Postdoctoral and Internship Centers, it has become a burdensome exercise over which students have no control.

Approvals: FGS Faculty Council 1 December 2016 • ASCP 25 January 2017

Academic Standards, Curriculum and Pedagogy Committee Report to Senate

11. Changes to the Degree Requirements for the PhD Program in Social Work • Faculty of Liberal Arts & Professional Studies / Faculty of Graduate Studies

ASCP recommends that Senate approve the following changes to the requirements for the PhD program in Social Work:

- Revisions to the Comprehensive Examination component: replacement of the 15-18 pages comprehensive paper proposal with a 3-page comprehensive paper outline, and elimination of the oral exam.
- Reduction in the required number of electives from 3 to 2 and adding the requirement that the electives be post-MSW courses
- Move the Doctoral Seminar (SOWK 7040) from third to second year

Rationale

The proposed changes are made in response to the program's recent cyclical program review. They are aimed at achieving two overarching goals: improving the structure of the comprehensive exam to better reflect the purpose of the program and facilitate student progress to the dissertation research; and improving the program processes and structures to enhance support of the doctoral candidate and to facilitate their successful completion of the program.

The revised number of elective credits will bring the requirements of York's program in closer alignment with those of Social Work doctoral programs at peer universities, where there is a range from one to three electives within the program structure. Since the program's MSW courses are primarily practice-oriented and the doctoral program is research based, adding the requirement of post-MSW courses better supports the doctoral program's outcomes of advanced scholarship related to the development and practice of critical knowledge, theory, skills and approaches to social work.

The mapping of the revised requirements to the Social Work program learning outcomes was completed as required.

Approvals: FGS Faculty Council 1 December 2016 • ASCP 25 January 2017

For Information

a. Minor Modifications to Curriculum

The following program changes have been approved by ASCP:

Education

Clarification of admission and degree requirements for the BEd (Technological Education) program

Academic Standards, Curriculum and Pedagogy Committee Report to Senate

AMPD

Minor changes to the degree requirements for the BA Honours Minor program in Theatre (Production)

Minor changes to the degree requirements for the Honours BFA and Honours BA programs in Theatre

Minor changes to the degree requirements for the BA Honours Minor in Computational Arts and Technology program

Glendon

Minor changes to the Bilingual requirement for all undergraduate programs at Glendon

Lassonde School of Engineering

Minor changes to the degree requirements for the Specialized Honours BEng program in Civil Engineering

b. Minor Modifications to Policies and Procedures

Revised Senate Guidelines and Procedures Governing Course Cross-Listings, Exclusions and Substitutions; attached as Appendix H.

Lisa Farley, Chair



Cross-Disciplinary Bergeron Entrepreneurs in Science &
Technology (BEST) Certificate in Technology
Entrepreneurship

Lassonde School of Engineering

c/o E. Terry Sachlos, DPhil (*Oxon*)
Associate Director, BEST
Department of Mechanical
Engineering BRG 437D, Lassonde
School of Engineering 416.736.2100 x
44685
terry.sachlos@lassonde.yorku.ca

1. Introduction

The Cross-Disciplinary Bergeron Entrepreneurs in Science & Technology (BEST) Certificate integrates technology, law and business into creative problem-solving and innovation and is designed to teach, promote, focus and recognize student entrepreneurial skills and knowledge. The BEST Certificate incorporates multidisciplinary courses from various Faculties across the University (namely, Lassonde, Schulich School of Business and Osgoode Hall Law School) that teach the essential entrepreneurship skills identified and listed as eight separate themes in **Table 1**. By concentrating all these skill outcomes into a well-defined and structured pathway, the BEST Certificate acts as an effective roadmap which students navigate throughout their degree, ultimately leading to either (1) starting their own ventures, or (2) playing a greater role in the management of technological innovation in larger organizations.

Table 1: The themes comprising the BEST Certificate and associated essential skills outcomes.

THEME	SKILL OUTCOME
1. Innovation	Appreciation for innovation and problem-solving
2. Communication	Effective communication strategies to convey often complex problems and solutions
3. Design	Awareness and implementation of design thinking principles
4. Professionalism	Integrity, professionalism and ethics in business
5. Tech Project	Utilizing technology to solve problems
6. Law	Understanding and applying law tools like intellectual property and Contracts
7. Business	Fundamental business principles for success and sustainability
8. Experiential (optional)	Opportunities for experiential entrepreneurship

The opportunity to earn the BEST Certificate will motivate already busy Lassondian students to focus their General Education studies in our BEng, BSc and BA degree programs (complementary studies in the BEng degree) in entrepreneurship. The BEST Certificate is a concrete way that allows Lassonde to integrate a formal academic program in entrepreneurship and better train and empower post-millennial Lassondians in securing employment or creating their own employment.

2. General Objectives and Learning Outcomes

The BEST Certificate crystallizes the vision of its founding donors. In 2012, Doug and Sandra Bergeron funded the BEST (Bergeron Entrepreneurs in Science and Technology) initiative, with the specific objective of creating an entrepreneurial initiative for science and engineering students at York University. Since that time, BEST has operated out of the Department of Mechanical Engineering. An Academic Director, Research Assistant and Administrator have all been recruited, along with a new faculty hire and Associate Director of BEST that started Sept 2016. The BEST initiative wants to continue building momentum and formalizing the original Bergeron vision by launching the BEST Certificate to both increase awareness of Lassonde's entrepreneurial activities and to enhance the educational opportunities for students.

The BEST Certificate is a novel approach to integrating the rigorous academic requirements of an engineering degree, with Lassonde's Renaissance Engineering approach, and to enhance experiential learning opportunities. On the academic side, the BEST Director has been involved in creating and teaching new *Renaissance Engineering* (LE/ENG 1101 and 1102) and *International Experience* (LE/ENG 3033) courses, and collaborating with Schulich (Finance, Management and Entrepreneurship) and Osgoode (Intellectual Property) on curriculum. He is also developing courses in *Technology Commercialization*, and *Innovation and*

Creativity. The new Associate Director is scheduled to teach *Renaissance Engineering 2* (LE/ENG 1102) and is currently developing and seeking approval for a new course in *Disruptive and Exponential Technologies*.

The BEST Certificate will integrate Lassondian education with tailored entrepreneurial courses and experiences and offer a rigorous academic path towards a comprehensive range of skills necessary to achieve students' entrepreneurial aspirations. The BEST Certificate (along with the BEST Lab) will be the manifestation of the BEST initiative, and act as a strong signal of our commitment to offer interested students an entrepreneurial education and enhance the brand of Lassonde as an entrepreneurial engineering school.

Students who obtain the BEST Certificate will be better equipped to either (1) start their own ventures; or, (2) to play a greater role in the management of technological innovation in larger organizations. The BEST Certificate will stimulate increased levels of technology entrepreneurial activity within Lassonde, facilitate technology venture creation and offer alternate career options for students interested in combining their interests in both technology and business.

3. Need and Demand

There is strong evidence that many potential engineering students are interested in entrepreneurship as a career option (Duval-Couetil, Reed-Rhoads, & Haghighi, 2012). In fact, many universities in Canada and the US now offer electives and Certificates in this area (such as the University of Toronto¹). However, few offer the ability to combine more entrepreneurial courses in the required academic program (such as Renaissance Engineering 1101 / 1102), electives in their Law and Business Schools, with novel experiential activities. Our launch of BEST, the new core/optional courses and unique entrepreneurial experiences, makes this the ideal time to launch the BEST Certificate, as a transcribed Certificate program.

As further evidence, over the past two years, nearly 200 Lassonde students have taken the specialist entrepreneurship courses, with 900 taking the required Renaissance Engineering course that include critical components of an entrepreneurial education (creative problem solving and design thinking). In addition, we have had nearly 100 students apply for the limited number of places on the international entrepreneurship course. In the Winter term alone, over 600 Lassonde students participated in over 20 entrepreneurial events, showing interest and demand for this Certificate.

4. Curriculum & Structure of the BEST Certificate

Lassonde BEng roadmap

The BEST Certificate is designed with an inherently modular framework in order to cater to the diversity of the various degree requirements present at Lassonde, namely BEng (Fig 1; Appendix E), BSc and BA (Hon) (Fig 2; Appendix E), while still fulfilling the University's certificate requirements. In general, the skill outcomes of the seven mandatory themes can be broadly achieved through existing courses already defined in each degree with the addition of business and law themes. Specifically for BEng, the five themes of innovation, communication, design, professionalism and technical project are already tooled into the degree course load with the balance comprised of cross-disciplinary business and law courses.

¹http://www.undergrad.engineering.utoronto.ca/Programs/Minors_Certificates/Engineering_Minors_Certificates/certificates/entrepreneurship.

Lassonde BEng

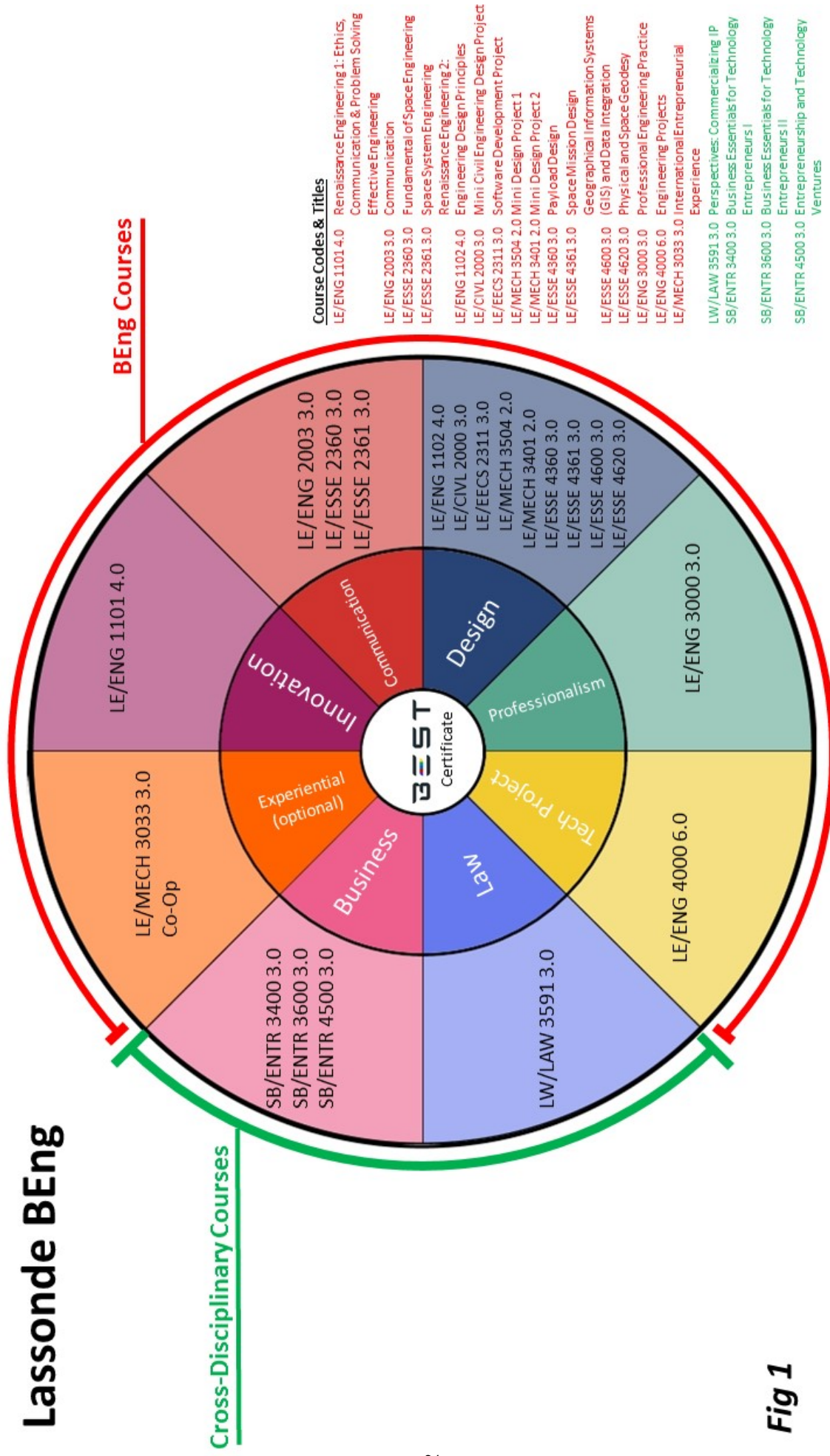
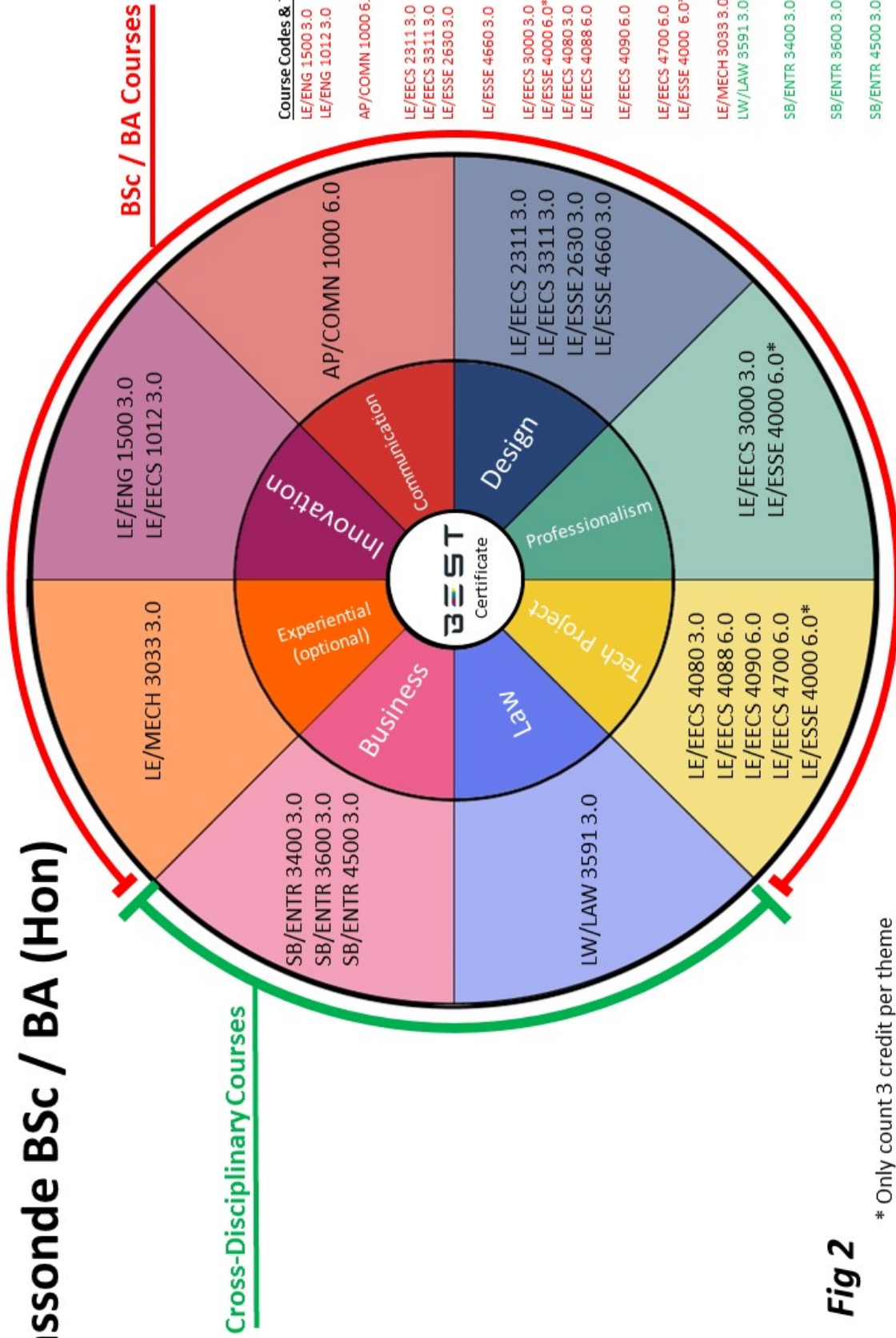


Fig 1

Lassonde BSc / BA (Hon)



* Only count 3 credit per theme

Fig 2

Lassonde BSc and BA (Hon) roadmap

Similarly, the skill outcome of these same themes can be achieved for Lassonde BSc and BA (Hon) degrees by utilizing similar courses (eg. Professional for BEng utilized LE/ENG 3000 while BSc and BA (Hon) degrees require LE/EECS 3000). All these courses are already running thereby making the BEST Certificate ready for immediate launch or 'turn-key' for both Lassonde BEng (**Fig 1**) and Lassonde BSc and BA (Hon) students (**Fig 2**). Several new courses are being planned or are already in the pipeline which will enhance the learning opportunities for Lassondians while further extending the reach of the BEST Certificate to other Faculties (**Fig 3**).

Lassonde BEng, BSc, BA (pipeline courses in development)

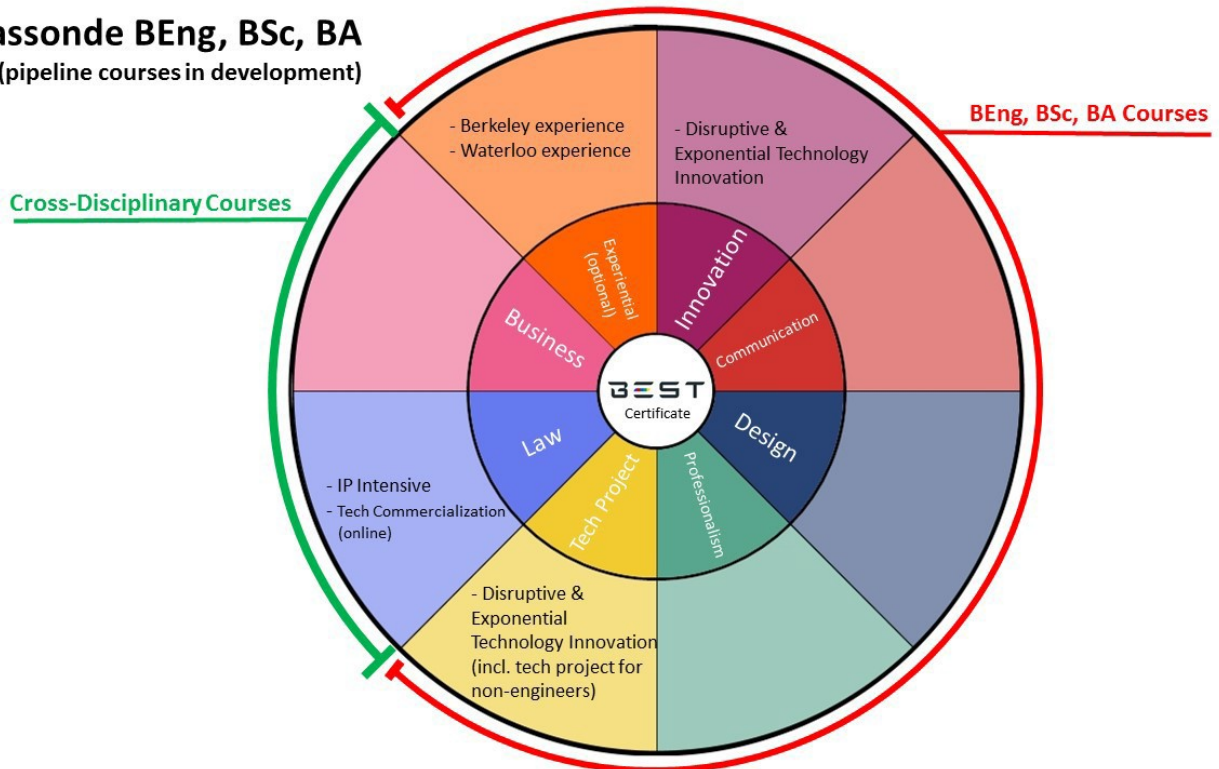


Fig 3: Pipeline courses currently in development to expand and extend the BEST Certificate

Faculty of Science roadmap

The BEST Certificate may be appealing to students in other Faculties at York University and provisions to offer the certificate to these students should be considered. The certificate's modular framework is once again useful in order to accommodate students in other Faculties. For example, Faculty of Science students can fulfil several themes within their degree program with their cross-disciplinary requirements being made up with law (Osgoode), business (Schulich) and innovation (Lassonde) (**Fig 4**). In this case, Lassonde's course contribution to the BEST Certificate is LE/ENG 1500 which teaches innovation and creativity and is open to all students. This course is approved and ready to be offered in Winter 2017, which permits the BEST Certificate to be turn-key for Faculty of Science students.

Example 1:

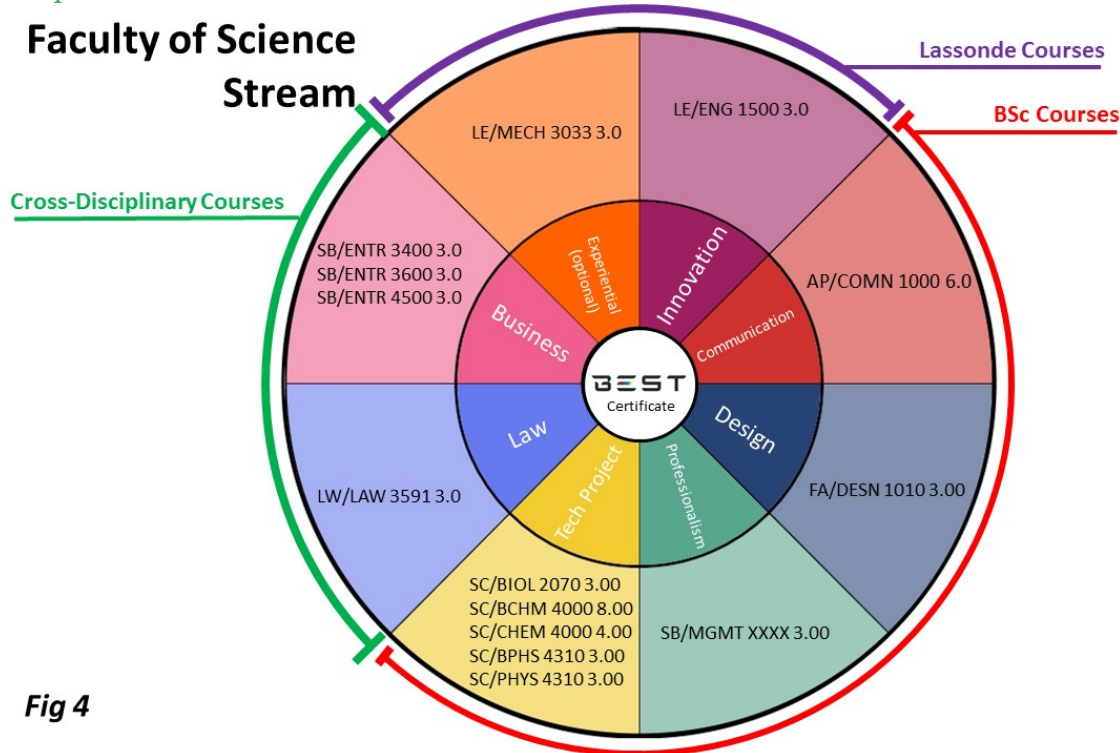


Fig 4: Turn-key implementation of BEST Certificate's modular framework to enable Faculty of Science to students enroll.

Other Faculties

The BEST Certificate recognizes technology entrepreneurship and as such, can be a powerful tool to motivate non-engineers / non-scientists to learn more about technology and its utility in entrepreneurship. Programs in Health (**Fig 5**) and AMPD (**Fig 5**) can achieve several skill outcomes within the degree requirements, with cross-disciplinary requirements coming from law (Osgoode), business (Schulich) and innovation & tech project (Lassonde). Lassonde provides the technology expertise to fulfil the tech project theme required for a certificate in technology entrepreneurship. In this scenario, the pipeline course, Disruptive and Exponential Technologies (**Fig 3**) would first need to be approved and launched before opening up the certificate to other Faculties like Health (**Fig 5**) or AMPD (**Fig 5**). Maintaining a strong focus on technology with entrepreneurship teaching coming from the Schulich business school ensures that the BEST Certificate remains a certificate in technology entrepreneurship instead of a generic certificate of entrepreneurship.

Example 2:MGMG

Cross-faculty: Health & AMPD

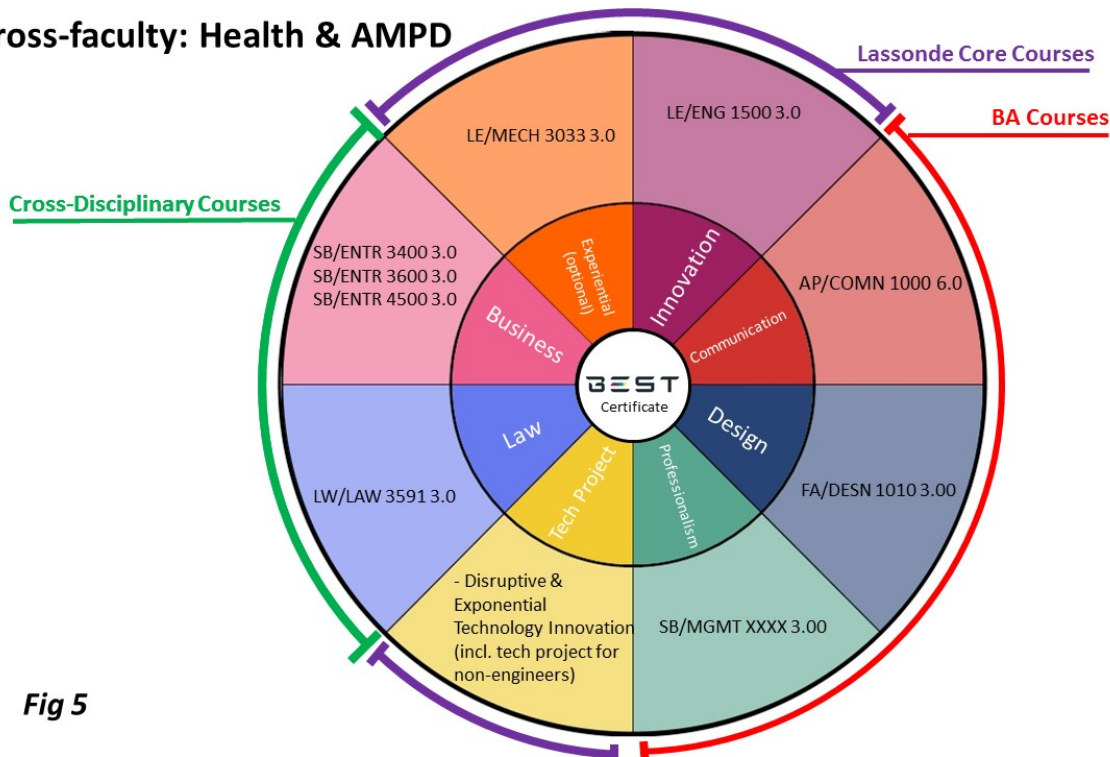


Fig 5

Fig 5: Development of Lassonde pipeline courses that can complement existing courses in other Faculties in order to offer the BEST Certificate to the Arts, Humanities and Social Sciences.

4.1 Describe the undergraduate certificate requirements and associated learning outcomes, including explicit reference to how the certificate curriculum and structure supports achievement of the learning outcomes.

Aligned with the Senate Undergraduate Certificate Legislation, Lassonde students completing the undergraduate BEST certificate must complete a total of 27.0 credits, with a minimum of 3 credits from approved courses (or equivalents) in each of 7 mandatory themes, with 12 of those credits coming from the cross-disciplinary Business and Law themes, and the remaining 15 credits compiled from disciplinary courses (Fig 6); have a cumulative grade point average (GPA) of 5.0 or greater; and at least 18 credits must be at 2000-level or above, including 6 credits from 3000-level or above.

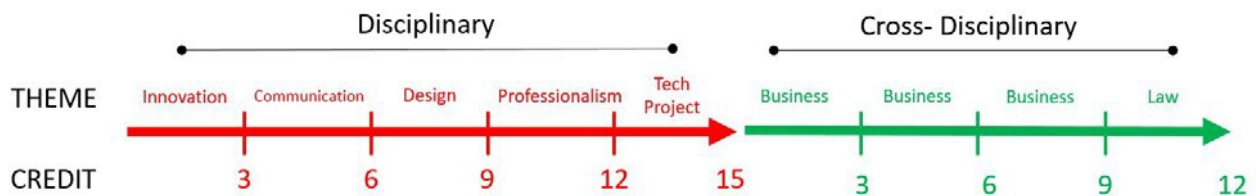


Fig 6: Schematic representation of credit requirements and allocation for Lassonde BEng, BSc and BA (Hon) students.

The Cross-Disciplinary Bergeron Entrepreneurs in Science & Technology (BEST) Certificate integrates technology, law and business into creative problem-solving and innovation and is designed to teach, promote, focus and recognize student entrepreneurial skills and knowledge. (Refer to **Table 1**: The themes comprising the BEST Certificate and associated essential skills outcomes.)

In general, the skill outcomes of the seven mandatory themes can be broadly achieved through existing courses defined in each degree with the addition of business and law themes. Specifically for BEng, the five themes of innovation, communication, design, professionalism and technical project are already aligned into the degree course load and associated learning outcomes with the balance comprised of cross-disciplinary business and law courses aimed towards developing the skills necessary to meet one of the two goals of the certificate, defined above.

The BEST Certificate is a novel approach to integrating the rigorous academic requirements of an engineering degree, with Lassonde's Renaissance Engineering approach and to enhance experiential learning opportunities. The BEST Certificate will integrate Lassondian education with tailored entrepreneurial courses and experiences and offer a rigorous academic path towards a comprehensive range of skills necessary to achieve students' entrepreneurial aspirations.

Our Lassondian programs are underpinned by the following twelve outcomes and the BEST certificate aims to further develop students skills within an experiential pedagogical approach aligned to the 7 mandatory themes of the certificate:

Program Outcomes (Graduate Attributes)	Description
1. Knowledge base for Engineering	Ability to demonstrate competence in university level mathematics, natural sciences, engineering fundamentals, and specialized engineering knowledge appropriate to the program.
2. Problem analysis	Ability to use appropriate knowledge and skills to identify, formulate, analyze, and solve complex engineering problems in order to reach substantiated conclusions.
3. Investigation	Ability to conduct investigations of complex problems by methods that include appropriate experiments, data analysis and interpretation, and synthesis of information in order to reach valid conclusions.
4. Design	Ability to design solutions for complex, open-ended engineering problems and to design systems, components or processes that meet specified needs with appropriate attention to health and safety risks, applicable standards as well as considerations for economics, environment, culture and society.
5. Use of engineering tools	Ability to create, select, apply, adapt, and extend appropriate techniques, resources and modern engineering tools to a range of engineering activities (both simple and intricate) with an understanding of the associated limitations.
6. Individual and team work	Ability to work effectively as a member and leader in a team (preferably in a multidisciplinary setting).
7. Communication skills	Ability to communicate complex engineering concepts within the profession and society at large. Such ability includes reading, writing, speaking and listening. This also includes the ability to comprehend and write effective technical reports and design documentation, and to give and effectively respond to clear instructions.

8. Professionalism	Ability to understand the roles and responsibilities of the professional engineer in society, especially the primary role for protection of the public and public interest.
9. Impact on society and environment	Ability to analyze social and environmental aspects of engineering activities. Such ability includes an understanding of the interactions that engineering has with the economic, social, health, safety, legal, and cultural aspects of society. This also includes the uncertainties in prediction of such interactions along with the concepts of sustainable design, research and development, and environmental stewardship.
10. Ethics and equity	Ability to apply professional ethics, accountability and equity.
11. Economics and project management	Ability to appropriately incorporate economics and business practices including project, risk, and change management into engineering practice and to understand their limitations.
12. Life-long learning	Ability to identify and to address their own educational needs in a changing world in ways sufficient to maintain their competence and to allow them to contribute to the advancement of knowledge.

Experiential education is a critical component of our programs and of this certificate and relies on various experiences such as field work, co-operative education, and project-based learning, but has its foundation in active exploration in practical laboratory work. The type of laboratory experience varies greatly across disciplines but all engineering students spend a significant fraction of their time and educational efforts on laboratory work. Despite this critical nature of the engineering laboratory these experiences are often treated as add-ons to courses – important but serving a local course rather than a program need. We believe that a better approach is to consider the laboratory experiences not as discrete events but as a part of process of building and elaborating a set of key technical competencies and a deep understanding of technology. An integrated and synoptic approach to laboratory education helps our students to see relationships between techniques, technologies and theory across the curriculum. This helps them to obtain the life-long learning skills that are perhaps the key technical hallmark of a successful engineer – the ability to rapidly, effectively and confidently adopt new technology and adapt existing technology to address technical challenges in a rapidly evolving field. Many of the technologies our students will need to work on ten or even five years from now may not exist.

See APPENDIX A for the BEST Certificate course mapping to ensure achievement of CEAB outcomes while meeting the UUDLEs

4.2 Address how the methods and criteria for assessing student achievement are appropriate and effective relative to the certificate learning outcomes.

Our Lassonde programs have developed a continuous improvement evaluation system to ensure that curriculum assessment and analysis are undertaken annually. In this process we collect learning outcome assessment data from every course in the School, analyze this data and evaluate how students are performing relative to the defined program outcomes. We then make recommendations for improvement via our “Program Assessment Group on Evaluation and Systems”, a committee of our Faculty Council. A similar process is planned for the all courses which comprise the BEST certificate.

Additionally, it should be noted that more than 85% of the courses in the defined themes of the BEST certificate underpin our structure of continuous improvement and the data from those exercises will be used to evaluate learning outcome performance in the BEST certificate.

Assessment Tools (see Table 2 for a full list) such as tests, quizzes, written assignments, and exams are more appropriate for Year 1 and Year 2 courses and a few Year 3 courses. The upper-year courses have demonstrated team work, report writing and oral presentation components. As such, these courses require additional evaluation and assessment criteria. The extent up to which a particular course meets a particular learning outcome can be assessed using the rubric presented in Table 3. This rubric is based on the material presented at the June 17, 2013 EGAD workshops on Graduate Attributes Assessment & Accreditation.¹ Indicator 'I' (*Introduction*) applies to all Year 1 courses and some Year 2 courses, whereas Indicator 'R' (*Reinforcement*) applies to most Year 2 and Year 3 courses. In contrast, Indicator 'A' (*Advanced*) applies to all Year 4 courses.

Test, Quiz and Exams
Project (in groups)
Participation in-class discussion
Participation in on-line discussions
Oral presentation / demonstration
Journal / lab notebook / portfolio
Poster or graphics (maps, blueprints, schematics, etc.)
Self or peer evaluation
Written assignment
Case studies analysis
Experiential learning (internships, site visits, etc.)
Other (report, model, video or audio clip, etc.)

Table 2: Tools used in course evaluation and assessment

I Introductory	R Reinforcement	A Advanced
Students are working at a basic level, working with the foundational elements, techniques or methodologies of the learning outcome.	Students are performing at an intermediate level (when measured against the final outcome). They are using the Introductory skills and knowledge of the outcome to evolve towards greater competency.	Students are learning how to perform the learning outcome as written, at a level that is expected of someone who is completing their degree.

Table 3: Rubric to assess the extent to which a course achieves a particular program-learning outcome

¹ EGAD Project 2013. Resources for recent EGAD workshops on Graduate Attributes Assessment & Accreditation. http://egad.engineering.queensu.ca/?page_id=859.

4.3 Provide a list of courses that will be offered in support of the undergraduate certificate. The list of courses must indicate the unit responsible for offering the course (including cross-lists and integrations, as appropriate), the course number, the credit value, the short course description, and whether or not it is an existing or new course. For existing courses, the frequency of offering should be noted. For new courses, full course proposals are required and should be included in the proposal as an appendix. (The list of courses may be organized to reflect the manner in which the courses count towards the program/field requirements, as appropriate; e.g. required versus optional; required from a list of specified courses; specific to certain concentrations, streams or fields within the program, etc.)

Below APPENDIX B provides a full listing of all courses offered in the various themes of the BEST Certificate along with their associated learning outcomes.

Notes:

*Courses that appear in more than one BEST roadmap

**eLearning focused course: The development of knowledge and skills through the use of information and communication technologies to support interactives for learning with content, activities and interaction with other people. The traditional face-to-face lectures formats are supplemented by the use of presentation or online tools such as videos, etc.

4.4 Describe the proposed mode(s) of delivery, including how it/they are appropriate to and effective in supporting the certificate learning outcomes.

A range of pedagogical tools will be employed by instructors to foster the culture of independent and life-long learning in students. Some examples include:

A combination of in-class and on-line lectures along with instructor-guided problem-solving (tutorial) sessions involving group work and hands-on laboratory and computer modelling sessions.

The flipped classroom, wherein students will engage in self-directed learning of course materials outside of regular in-class contact hours blended with instructor-guided in-class discussions, design studios, problem-solving sessions, hands-on laboratory sessions and computer modelling activities.

Students also work in multidisciplinary groups and implement a systematic approach in terms of defining the problem, outlining of project's objectives and scope, acquiring suitable data and resources, generating alternatives and selecting the optimal alternative, and completing a detailed design of the chosen alternative.

Our strategy is also to provide the students with a flipped classroom experience rather than the traditional classroom lecture halls. Our key elements in teaching philosophy are eLearning, blended learning and experiential education.

The eLearning practice afforded through the certificate leads to the development of knowledge and skills through the use of information and communication technologies to support interactives for learning with content, activities and interaction with the instructor and peers. Here traditional face-to-face lectures formats are supplemented by the use of presentation or online tools such as videos, etc. in form of a flipped classroom. In the blended learning mode, also known as 'hybrid' learning, the class time is a combination of face-to-face and online lecture delivery. The face-to-face instruction is replaced by online instruction for one-third of the course, while one-third of the course is delivered face-to-face.

Certificate Management

The BEST certificate will be managed by the BEST Director and Associate Director, with advice from the BEST Academic Steering Committee (BASC). The BASC will consist of 4 Lassonde, Schulich and Osgoode faculty members, plus 2 external to York University faculty, who have knowledge of, and interest in, technology entrepreneurship. In consultation with the Department of Mechanical Engineering – Undergraduate Program Director, the BEST Director and Associate Director will coordinate all efforts to administer the certificate and ensure accessibility and quality of the courses. The BEST Director and Associate Director will also ensure:

- That the certificate is approved by the University, and managed in accordance with University regulations
- That Lassonde students are encouraged to participate in the Certificate, and that students who successfully complete the requirements will be awarded the Certificate at convocation
- That the academic courses (both existing and new/equivalent) meet the required academic standards

5. Requirements / Certificate Structure

Aligned with the *Senate Undergraduate Certificate Legislation*, Lassonde students completing the undergraduate BEST certificate must complete a total of 27.0 credits, with a minimum of 3 credits from approved courses (or equivalents) in each of 7 mandatory themes, with 12 of those credits coming from the cross-disciplinary Business and Law themes, and the remaining 15 credits compiled from disciplinary courses (**Fig 6**); have a cumulative grade point average (GPA) of 5.0 or greater; and at least 18 credits must be at 2000-level or above, including 6 credits from 3000-level or above.

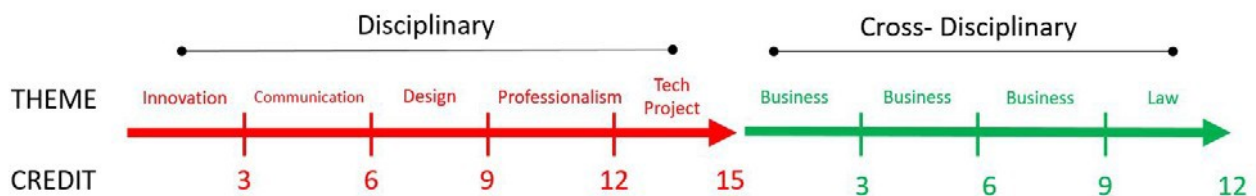


Fig 6: Schematic representation of credit requirements and allocation for Lassonde BEng, BSc and BA (Hon) students.

The academic courses within each program that meet the requirements for the BEST Certificate are included in Appendix E. All these courses (except the *Innovation and Creativity*) have already been created and are being offered (aka 'Turn-key'). The content and learning objectives of these courses have been designed holistically, to provide an overview of technology entrepreneurship, and to teach some of the specific skills required by technology entrepreneurs. Course outlines of the cross-disciplinary business and law courses are included in Appendix B. Full Senate rules for Certificate development are reproduced in Appendix C.

6. Resources

Faculty

All the academic courses are already included in the Lassondian undergraduate program, with the exception of the *Innovation and Creativity* course, which is being planned as a York University-wide general education course, to be launched in January 2017. A course code, LE/ENG 1500 has already been assigned. Faculty teaching existing courses will be engaged and aware of their contribution to the BEST Certificate.

6.1 Laboratory facilities

The only space required for the BEST Certificate is the BEST lab in the BCEE. Others general purpose rooms will be booked through Lassonde/York.

6.2 Administrative

York University already offers several certificates and the BEST Certificate will tap into these existing central resources to administer and issue Certificates to successful candidates. The BEST Director and team will provide any administrative support required. Both the Mechanical Engineering Undergraduate Program Director and the Director of BEST will co-sign any administrative requirements. If there are any unforeseen expenses, these will be assumed by the Dean's Office, Lassonde School of Engineering and not the Department of Mechanical Engineering.

7. Support Statements

Support statements from the Vice Dean, Chairs, Contributing Departments & Faculties are provided in Appendix F.

Appendices

- Appendix A: BEST Certificate course mapping to ensure achievement of CEAB outcomes while meeting the UUDLEs
- Appendix B: Full listing of all courses offered in the various themes of the BEST Certificate along with their associated learning outcomes
- Appendix C: Overview of Relevant University Undergraduate Certificate Guidelines
- Appendix D: References
- Appendix E: BEST Cross-Disciplinary Certificate - Calendar Copy
- Appendix F: Letters of Support

APPENDIX A: BEST Certificate course mapping to ensure achievement of CEAB outcomes while meeting the UUDLEs

LOs	Name of Certificate: BEST (Bergeron Entrepreneurs in Science & Technology) <i>This certificate is awarded to students who have demonstrated:</i>	Correspondence to CEAB Graduate Attributes	Courses that contribute towards fulfilling the expectation
Depth and Breadth of Knowledge	1. Explain and demonstrate the use of scientific, technological and diverse principles underlying their branch of engineering 2. Explain and demonstrate the use of subject-specific fundamentals. 3. Explain and demonstrate the use of subject-specific design of engineering. 4. Describe and explain how emerging issues may affect their branch of engineering and technology, relative to intellectual property. 5. Explain how business, economics and legal concepts apply in engineering projects or activities	3.1.1 A knowledge base for engineering: Ability to demonstrate competence in university level mathematics, natural sciences, engineering fundamentals, and specialized engineering knowledge appropriate to the program. (1) (2) (3) 3.1.9 Impact of engineering on society and the environment: Ability to analyze social and environmental aspects of engineering activities. (4) 3.1.11 Economics and project management: Ability to appropriately incorporate economics and business practices including project, risk, and change management into the practice of engineering and to understand their limitations. (5)	LE/ENG 1102, 3000, ENG 4000 LE/EECS 1012, 2311, 3311, 3000 LE/MECH 3504 LW/LAW 3591 SB/ENTR 3400, 3600, 4500 LE/ESSE 2360, 2361, 2630, 4360, 4361, 4600, 4620, 4660
Knowledge of Methodologies	6. Identify, formulate and solve problems using applicable methods, with an understanding of the methodologies' limitations 7. Select and use appropriate experimental and or modelling methods	3.1.5 Use of engineering tools: Ability to create, select, apply, adapt, and extend appropriate techniques, resources, and modern engineering tools to a range of engineering activities (from simple to intricate) with an understanding of the associated limitations. (6) (7)	LE/ESSE 2360, 2361, 4360, 4361, 4600, 4620, 4660 LE/CIVL 2000 LE/EECS 2311, 3311

Application of Knowledge	8. Investigate complex problems by methods that include appropriate experiments, analysis and interpretation of data, and synthesis of information, in order to reach valid conclusions. 9. Identify, formulate, analyze, and solve complex engineering problems in order to reach substantiated conclusions. 10. Analyze products, and processes and methods. 11. Design systems that meet defined, specified requirements by combining theory and state of the art practice. 12. Demonstrate laboratory skills, integrating safety procedures. 13. Incorporate environmental issues, sustainability, information management, project management and business aspects into engineering practice.	3.1.3 Investigation: Ability to conduct investigations of complex problems by methods that include appropriate experiments, analysis and interpretation of data and synthesis of information in order to reach valid conclusions. (8) 3.1.2 Problem analysis: Ability to use appropriate knowledge and skills to identify, formulate, analyze, and solve complex engineering problems in order to reach substantiated conclusions. (9) 3.1.5 Use of engineering tools: Ability to create, select, apply, adapt, and extend appropriate techniques, resources, and modern engineering tools to a range of engineering activities, from simple to complex, with an understanding of the associated limitations. (10) 3.1.4 Design: Ability to design solutions for complex, open-ended engineering problems and to design systems, components or processes that meet specified needs with appropriate attention to health and safety risks, applicable standards, and economic, environmental, cultural and societal considerations. (11) 3.1.9 Impact of engineering on society and the environment: Ability to analyze social and environmental aspects of engineering activities. (13)	LE/ENG 1101, 1102, 1500, 3000, 4000 LE/CIVL 2000 LE/EECS 2311, 3311, 3000, 4080, 4088, 4090, 4700 LE/MECH 3401 LE/ESSE 2630, 4360, 4361, 4600, 4620, 4660, 4000 SB/ENTR 3600, 4500
Communication Skills	14. Communicate effectively orally and in writing with the community and with society at large;	3.1.7 Communication skills: Ability to communicate complex engineering concepts within the profession and society at large. Such ability includes reading, writing, speaking and listening. This also includes the ability to comprehend and write effective technical reports and design documentation, and to give and effectively respond to clear instructions. (14)	LE/ENG 1101, 1102, 2003, 3000, 4000 LE/ESSE 2361 AP/COMN 1000 LE/CIVL 2000

Awareness of Limits of Knowledge	15. Use databases and other sources of information to investigate a problem. 16. Identify the limits of one's knowledge and be able to get help and appropriate expertise. 17. Recognize the need for and engage in independent life-long learning.	3.1.12 Life-long learning: Ability to identify and to address their own educational needs in a changing world in ways sufficient to maintain their competence and to allow them to contribute to the advancement of knowledge. (16) (17)	LE/ENG 1102, 3000, 4000 LE/CIVL 2000 LE/ESSE 4000 LE/EECS 4080, 4088, 4090, 4700
Autonomy and Professional Capacity	18. Incorporate health, safety and legal issues in projects and professional practice. 19. Determine the impact of engineering solutions in a societal and environmental context. 20. Practice according to professional ethics, responsibilities and norms of the engineering profession. 21. Function effectively as a member of a team and independently 22. Evaluate entrepreneurial and innovative opportunities using formal innovative assessment tools	3.1.8 Professionalism: Ability to understand the roles and responsibilities of the professional engineer in society, especially the primary role for protection of the public and public interest. (18) (20) (22) 3.1.9 Impact of engineering on society and the environment: Ability to analyze social and environmental aspects of engineering activities. (19) 3.1.10 Ethics and equity: Ability to apply professional ethics, accountability, and equity. (20) (22) 3.1.6 Individual and team work: Ability to work effectively as a member and leader in teams, preferably in a multi-disciplinary setting. (21) (22)	LE/ENG 1101, 1102, 1500, 3000, 4000 LE/MECH 3033, 3401 LE/EECS 3000

APPENDIX B: Full listing of all courses offered in the various themes of the BEST Certificate along with their associated learning outcomes

Course Code	Course Title	Existing or New	Offering Freq	Cr	Course Description	Course Learning Outcomes
1. Innovation: Appreciation for innovation and problem-solving						
LE/ENG 1101	Renaissance Engineer 1: Ethics, Communication & Problem Solving	Existing	F	4	Who is an engineer and what are his/her ethical and academic integrity obligations; communications strategies for technical subjects in oral and written forms; dealing with ambiguity, uncertainties, and open ended problems in a technical context, problem definition strategies. 4 hours per week lectures and 1 hour per week tutorial session.	Learn the fundamentals of engineering ethics in academia and profession Identify potential ethical challenges facing engineers and to learn how to find remedies to deal with them Develop skills in effective engineering communications, including the fundamentals of rhetorical writing and the basic components required to prepare and give a written/oral presentation Learn engineering methods of engineering problem analysis and estimation Application of various approaches to comprehend and solve engineering problems in a systematic manner
LE/ENG 1500	Innovation and Creativity	Existing	W	3	Being creative is about solving problems or approaching opportunities in novel and valuable ways. This course, is designed to help students harness their creative potential by stimulating their own creative process, in order to help them develop ideas that create real value and have a positive impact on society. Creativity can be applied across many disciplines, and this course is designed for students from all faculties, with enhanced learning opportunities fostered through projects delivered in	Understand impact of innovation & creativity on organizations, institutions & society Assess and look for ways to enhance your creativity, innovation and problem solving style to improve your performance. Understand the impact of entrepreneurship & innovation on society Understand alternative innovation strategies Apply creativity theories to the creative problem solving process Apply creativity tools to identify problems Evaluate entrepreneurial and innovative opportunities using formal innovation assessment

					cross disciplinary teams. The course will help students learn how to observe and frame critical problems, and then identify and choose potential solutions that can be implemented by individuals or organizations. As a consequence of participating in this course, students will become an innovation enabler in any type of organization, or better able to use their own creativity to create a start-up. Students will start by exploring their own creativity and problem solving style, before being introduced to creative problems solving frameworks, tools and processes, which they can deploy while solving real problems, both individually and in teams. Course credit exclusions: LE/ENG 1101 4.00, LE/ENG 1102 4.00	tools Understand the challenges associated with implementing innovative ideas
LE/EECS 1012	Net-centric Introduction to Computing	Existing	Su + F	3	The objectives of 1012 are threefold: providing a first exposure to event-driven programming, teaching students a set of computing skills (including reasoning about algorithms, tracing programs, test-driven development, unit testing), and providing an introduction to computing within a mobile, net-centric context. It uses problem-based approach to expose the underlying concepts and an experiential laboratory to implement them. A mature mobile software infrastructure (such as HTML, CSS, and JavaScript) is used so that students can pick up key	Use a set of computing skills such as reasoning about algorithms, tracing programs, test-driven development, and diagnosing faults. Explain and apply fundamental constructs in event-driven programs, including variables and expressions, control structures (conditionals/loops), and API usage Write simple programs using a given software infrastructure, API, and tool chain Gain exposure to net-centric computing, client-server applications, and simple relational database use Become familiar with the notion of syntax, both for programs and documents, and the principle of separation of concerns.

					programming concepts (such as variables and control flow) within a client-server context without being bogged down in complex or abstract constructs. Laboratory exercises expose students to a range of real-world problems with a view of motivating computational thinking and grounding the material covered in lecture. Prerequisites: One of (1)-(3) below must be met: (1) (New high school curriculum): One 4U Math course with a grade of at least 75%. (2) Completion of 6.00 credits from York University MATH courses (not including courses with second digit 5) with a grade point average of 5.00 (C+) or better over these credits; (3) Completion of 6.00 credits from York University mathematics courses whose second digit is 5, with an average grade not below 7.00 (B+). Course credit exclusions: AP/ITEC 3020 3.00; SC/CSE 2041 3.00, LE/SC/CSE 2041 4.00, LE/EECS 2041 4.00.	
2. Communication: Effective communication strategies to convey often complex problems and solutions						
LE/ENG 2003	Effective Engineering Communication	Existing	W	3	Students learn to effectively employ communication strategies essential to a successful engineering career, including the social, rhetorical, ethical, and practical aspects of professional communications. The focus is on building individuals' confidence and judgment through communications assignments based on case studies. Two lecture hours per week. Two	Adhere to verbal and written instructions in a professional context. Explain engineering concepts to a variety of audiences using appropriate methods. Develop and provide technical information clearly, using appropriate communication strategies. Effectively develop and present in the written form a technical document (including charts, tables, graphs, diagrams, etc.)

					laboratory hours per week. Prerequisites: LE/ENG 1101 4.0.	Effectively present engineering material orally using a variety of techniques and methods. Evaluate and edit technical reports and design documents. Analyze and identify their own communication skills as an Engineer, identifying gaps and areas for improvement.
LE/ESSE 2360	Fundamentals of Space Engineering	Existing	F	3	The course provides an introduction and overview of space engineering. Space engineering activities are surveyed by segment and by sub-discipline and key concepts are introduced. The skillsets required of space engineers are investigated. Written and oral technical communication skills are emphasized. The topics discussed in the course provide the fundamentals of all aspects of space engineering as a profession and includes illustrative examples and discussions with practicing space engineers in the field. 3.0 contact hours per week; 1.0 laboratory hour per week. Prerequisites: ENG 1101 4.0 and ENG 1102 4.0 or permission of the instructor.	Describe current space activities in Canada and internationally Contextualize particular missions and space developments compared to the state of the art Apply key concepts in space engineering to the design of space elements Identify the skillsets required for particular space segment activities Classify missions by application and subject Develop simple quality engineering processes appropriate for space use Specify simple quantitative orbital and navigation system parameters based on requirements Operate ground segment equipment to test simple spacecraft command interfaces
LE/ESSE 2361	Space Systems Engineering	Existing	W	3	The objective of this course is to provide the student with an introduction to systems engineering with an emphasis on the following topics: the systems engineering process, requirements, design fundamentals, subsystem fundamentals, trade studies,	Explain the systems engineering process in the context of space engineering Identify the importance of this methodology to successful engineering projects Clearly communicate engineering tasks and constraints Demonstrate an working knowledge of the tools and

					integration, technical reviews, and case studies. The course is also intended to prepare the student for the payload/mission design courses (ESSE 4360 and 4361) which are more application oriented. Three lecture hours. Prerequisites: None.	metrologies of space systems engineering
AP/COM N 1000	Introduction to Communications	Existing	Y	6	This course provides a critical overview of the main issues in the field of communication and media. It examines how forms and processes of communication are implicated in our understanding of the world at both the personal and social levels. Course credit exclusions: AP/COMN 1310 9.00 (prior to Fall 2012), AP/SOSC 2410 6.00, AP/SOSC 2410 9.00. PRIOR TO FALL 2009: Course credit exclusions: AS/SOSC 1310 9.00, AS/SOSC 2310 9.00 (prior to Fall/Winter 2005-2006), AK/SOSC 2410 6.00 and AK/SOSC 2410 9.00.	
3. Design: Awareness and implementation of design thinking principles						
LE/ENG 1102**	Renaissance Engineer 2: Engineering Design Principles	Existing	W	4	This course will cover: engineering design methodology; features and elements of good design with environment and human interface considerations; aesthetics in design and idea communication using graphics and technical drawings. Lectures: 4 hours per week for 12 weeks. Tutorials: 1 hour per week for 12 weeks Pre-req.: ENG 1101	Formulate a design problem based on researching and understanding customer's needs. Apply the engineering design process learnt in the course to conceptualize design solution(s) to satisfy identified customer needs Develop acceptable design solutions using basic rules, principles & guidelines of design for X (e.g., X = quality, fabrication, environmental sustainability) in response to customer's needs Compare different design solutions in response to a defined design problem using engineering design

						principles (e.g., Axiomatic design approach) Differentiate good and bad design solutions in the context of ergonomics and aesthetics Create simple freehand sketches, pictorial sketches and orthographic sketches to illustrate details of a conceptual design or a given product
LE/CIVL 2000	Civil Engineering Design Project	Existing	W	3	Introduction to principles of engineering design via application to a suitable civil engineering project. Students work in groups of 3 or 4, with periodic monitoring of group interaction and performance. Deliverables include a formal design report and a formal oral presentation in front of peers and invited guests. Students' learning experience is enhanced through guest lectures from prominent member of civil engineering industry and academia. Prerequisites: LE ENG 2001 3.00, LE CIVL 2150 3.00 Co-requisites: LE/ENG 2003 3.00.	Understand and apply civil engineering design process Produce a technical report on the design project Effectively communicate the final design - in an oral presentation Able to assess their own performance within a team and review strengths and weaknesses of other team members Understand the role of professional engineers in the protection of the public Apply basic economics and project management principles in civil engineering design
LE/EECS 2311*	Software Development Project	Existing	W	3	This course allows students to develop a significant piece of software utilizing all the skills they have acquired so far. This includes requirement elicitation, system specification, implementation, testing, deployment, and user documentation. Two lecture hours and two laboratory hours per week. One term. Three credits. Prerequisites: General Prerequisite; LE/EECS 1030 3.00 or LE/EECS 2030 3.00. (NOTE: The General Prerequisite is a cumulative GPA of 4.50 or better over all major EECS courses. EECS courses with the	Describe the requirements of a large software system Select appropriate system elements for a high-level design description Derive and implement test cases at the unit and system level Produce a detailed user manual for an interactive system Implement a large software system from scratch

					second digit "5" are not major courses.)	
LE/MECH 3504	Thermofluid Laboratory	Existing	W	3	Building on the foundational knowledge of thermodynamics and basic skills in instrumentation, this course will provide students with an in-depth experience in measurement methods used in micro- and macro-systems. A select number of laboratory experiments and demonstrations will deal with thermodynamics (e.g. power cycles, or heat pumps), fluid mechanics (flow in the pipes and losses), fluid machines (e.g. pumps or fans), flow measurements techniques (e.g. from traditional to advanced optical systems e.g. PIV), conduction/convective and radiation heat transfer, heat exchangers, etc. Safety practices in laboratory environment are reinforced. Prerequisites: LE/MECH 2201 3.0; LE/MECH 2202 3.0; LE/MECH 2502 3.0	Interpret observations and experimental results after conducting experiments in the context of fluid mechanics (flow in pipes, pump performance, hydrostatics, flow measurements, and aerodynamics). Compare and contrast results obtained from experimental investigation against various fundamental concepts of thermodynamics cycles (e.g., Vapor power cycles and refrigeration cycles). Relate observations and measurements to various fundamental concepts of heat transfer (Modes of heat transfer and heat exchangers) after conducting experimental studies. Develop concise and professional reports that reflect critical analysis of experimental data. Recognize laboratory safety guidelines and practices related to performing experiments in the field of Thermofluids.
LE/MECH 3401	Mini Design Project 2	Existing	W	2	This project-based course involves a semester-long team project that is limited in scope, but open-ended and/or requiring multiple solutions. Students will also practice advanced machining techniques and apply them to fabricate parts in their projects. Lecture sessions are designed to provide complementary training in different areas of project execution such that students will be well prepared to succeed in their final year capstone project. Students have the option of choosing a project in any area of mechanical engineering; they are	Formulate engineering problems through communication with potential clients (e.g., industry partner, faculty member, etc.) and/or literature survey to frame the mini-design project. Practice advanced machining techniques to fabricate parts with complicated geometries. Apply fundamental knowledge in natural science, mathematics, and core mechanical engineering sciences and/or engineering tools (e.g., simulation software) to solve real-world engineering design problems. Construct a design solution to a real-world engineering problem with appropriate considerations of social, environmental, legal, and

					also encouraged to work in partnership with industry, consult a practicing engineer, and/or collaborate with students from a technical college. Evaluation criteria include written and oral communications of technical solutions, as well as economic analysis and/or other analyses related to entrepreneurial opportunities. Prerequisites: LE/MECH 2201 3.0; LE/MECH 2412 3.0 or LE/MECH2402 2.0; LE/MECH 2502 3.0; LE/MECH 3202 3.0	regulatory factors. Demonstrate project management skills to resolve conflicts among team member and to ensure reasonable progress to key milestones. Develop concise and professional presentation tools (e.g., Powerpoint presentation, reports, poster, prototype, etc.) that reflect critical analysis of experimental data.
LE/ESSE 4360	Payload Design	Existing	F	3	This course provides students with a comprehensive and accurate approach for the specification and detailed design of different spacecraft payloads, including optical payload, microwave payload, communications payload, and planetary exploration payload. Reliability analysis and its application will also be covered for space systems. Payload design projects will be assigned to students during the course. Three lecture hours per week. Prerequisites: LE/ENG 2001 3.00; SC/ENG 2002 3.00 or permission of the instructor.	Understand design procedures of space mission/payload adopted by different space agencies Understand the working principles of different space agencies Perform basic design of optical space payload and link budget for communication satellites Calculate key parameters for space-based radar payload (RAR and SAR) Select and design space payload in a team environment
LE/ESSE 4361	Space Mission Design	Existing	W	3	This course covers the basic aspects of space mission design from a "blank sheet". It includes mission design structure using systems engineering approaches to the design problem. Mission design starts with a set of mission objectives and aims to develop a viable solution for meeting these	Demonstrate an overall knowledge and understanding of space systems The ability to engineer a preliminary space mission architecture Apply the ability to produce a preliminary mission analysis that includes an understanding of performance and measures of effectiveness

					objectives given a set of technical cost and programmatic constraints. This course brings together systems engineering, mission types, objectives, technical readiness, risk mitigation, mission subsystems, and cost estimation. Three lecture hours. Prerequisites: LE/ESSE 4360 or permission of the instructor.	Perform trade studies that will lead to improved mission performance and effectiveness Communicate technical concepts and requirements to other engineers for review and evaluation. These communication elements are a combination of written, pictorial and organizational forms of communication
LE/ESSE 4600	Geographical Information Systems (GIS) and Data Integration	Existing	W	3	Project-oriented geomatics course using GIS systems (Arc/Info and S-Plus or SPSS for UNIX) and various techniques (map algebraic, statistical, fuzzy logic, AI, neural network and fractal/multifractal) for integrating diverse dataset (geological, geophysical, geochemical, remote sensing and GPS). Two lecture hours, two laboratory hours. One term. Three credits. Prerequisite: One of LE/ESSE 3600 3.00, AP/SC/GEOG 3180 3.00, AP/SC/GEOG 4340 3.00, ES/ENVS 3520 3.00, ES/ENVS 4520 3.00, or permission of the instructor. Prior to Fall 2014: Prerequisite: One of LE/EATS 3300 3.00, AP/SC/GEOG 3180 3.00, AP/SC/GEOG 4340 3.00, ES/ENVS 3520 3.00, ES/ENVS 4520 3.00, or permission of the instructor. Prior to Summer 2013: Prerequisite: One of SC/EATS 3300 3.00, AP/SC/GEOG 3180 3.00, AP/SC/GEOG 4340 3.00, ES/ENVS 3520 3.00, ES/ENVS 4520 3.00, or permission of the instructor.	Describe and explain the main steps and processes involved in data integration in GIS Critically evaluate the results obtained by various data integration techniques Perform various spatial decision support modelling processes using ArcGIS ModelBuilder and other extensions Develop basic skills for conducting spatial decision projects with real world data Understand various potential improvements of data analysis technologies available in the current GIS
LE/ESSE 4620	Physical and Space Geodesy	Existing	W	3	Local treatment of the Earth's gravity field. Boundary value problems. Normal	Apply knowledge of the spherical harmonic representation of the Earth's global gravity field

					and disturbing potential, the normal gravity formula. Geoid, geoidal undulations, deflections of the vertical. Stokes and Vening Meinesz formulae. Gravimetry and gravity reductions. Height systems. Tides. Gravity space missions. Three lecture hours weekly and three hours of laboratory exercises every other week. One term. Three credits. Prerequisites: LE/ESSE 3020 3.00; LE/ESSE 3610 3.00; LE/ESSE 3620 3.00; LE/ESSE 4610 3.00. Prior to Fall 2014: Prerequisites: LE/EATS 3020 3.00; LE/EATS 3610 4.00 or LE/ENG 3110 4.00; LE/EATS 3620 4.00 or LE/ENG 3120 4.00; LE/EATS 4610 3.00 or LE/ENG 4110 3.00. Prior to Summer 2013: Prerequisites: SC/EATS 3020 3.00; SC/EATS 3610 4.00 or SC/ENG 3110 4.00; SC/EATS 3620 4.00 or SC/ENG 3120 4.00; SC/EATS 4610 3.00 or SC/ENG 4110 3.00.	Formulate the three geodetic boundary value problems and apply them to the local determination of the geoid using gravity measurements Design software for geoid model determination Perform the design, measurement and adjustment of gravity networks Formulate height systems and apply them to the design of height networks Critically evaluate space gravity missions and the development of global geoid models Critically evaluate satellite altimetry and oceanic geoid determination
LE/EECS 3311	Software Design	Existing	F+W	3	A study of design methods and their use in the correct implementation, maintenance and evolution of software systems. Topics include design, implementation, testing, documentation needs and standards, support tools. Students design and implement components of a software system. Three lecture hours and 1.5 lab hours per week. Prerequisites: General prerequisite; LE/EECS 2030 3.00 or LE/EECS 1030 3.00; LE/EECS 2011 3.00; SC/MATH 1090 3.00; LE/EECS 2031 3.00. Course credit exclusions: LE/CSE	Describe software specifications via Design by Contract, including the use of preconditions, postconditions, class invariants, loop variants and invariants Implement specifications with designs that are correct, efficient and maintainable Develop systematic approaches to organizing, writing, testing and debugging software Develop insight into the process of moving from an ambiguous problem statement to a well-designed solution (analysis) Design software using appropriate abstractions, information hiding, and design patterns (design)

					3311 3.00, AK/AS/SC/CSE 3311 3.00. (NOTE: The General Prerequisite is a cumulative GPA of 4.50 or better over all major EECS courses. EECS courses with the second digit "5" are not major courses.)	Develop facility in the use of an IDE for editing, organizing, writing, debugging, testing and documenting code including the use of BON/UML diagrams for documenting designs. Develop the ability to write precise and concise software documentation that also describes the design decisions and why they were made
LE/ESSE 2630	Field Surveys	Existing	S	3	A two-week field camp comprising field and office work that simulate professional practice. Students participate in organizational, planning, scheduling and logistical aspects of field operations, instrument familiarization and testing, establishment of geodetic control, and land boundary, highway and construction surveys. Two-week field surveys. No lecture. Three credits. Prerequisite: LE/ESSE 2620 3.00. Prior to Fall 2014: Prerequisite: LE/EATS 2620 4.00 or LE/ENG 2120 4.00. Prior to Summer 2013: Prerequisite: SC/EATS 2620 4.00 or SC/ENG 2120 4.00.	Describe and explain basic surveying techniques in construction and topographic surveying Design, plan, organize and schedule construction and topographic surveying projects Explain and apply relevant professional specifications and guidelines Demonstrate knowledge and apply safety guidelines and regulations Establish basic horizontal and vertical control for construction and topographic surveying Conduct the observation analysis and basic positioning data processing Conduct topographic surveying and generate large scale topographic maps Document, present and report results of construction and topographic surveying projects
LE/ESSE 4660	Cadastral Surveys and Land Registration Systems	Existing	F	3	Cadastral systems, survey law and the role of the professional land surveyor. The Dominion Lands Survey System and Land Surveys Acts and Regulations. Cadastral surveys, including surveys of Canada lands for aboriginal land claims and coastal boundaries. Land registration systems in Canada. Three lecture hours and three hours of laboratory exercises per week. One	Explain the nature of law and the legal system as they relate to surveying Identify the relevant material from various sources that contributes to and informs a surveyor's judgment as to the location of a retraced boundary Clearly communicate – verbally and in writing – the results of your research as well as the reasoning underlying your opinions Describe how survey law – and the application of

					term. Three credits. Prerequisite: LE/ESSE 2620 3.00. Prior to Fall 2014: Prerequisite: LE/EATS 2620 4.00 or LE/ENG 2120 4.00. Prior to Summer 2013: Prerequisite: SC/EATS 2620 4.00 or SC/ENG 2120 4.00.	legal principles to facts established through evidence – impacts a professional surveyor's work and responsibility
4. Professionalism: Integrity, professionalism and ethics in business						
LE/ENG 3000**	Professional Engineering Practice	Existing	F	3	An introduction to the legal and ethical frameworks of the engineering profession, preparing students for the Professional Practice Examination required for certification as a professional engineer. Also covered are associated professional issues such as entrepreneurship, intellectual property and patents. Three lecture hours per week. One term. Three credits. Prerequisites: Second-year engineering courses (stream specific), including LE/ENG 2001 3.00 and LE/ENG 1000 6.00. Prior to Summer 2013: Prerequisites: Second-year engineering courses (stream specific), including SC/ENG 2001 3.00 (or SC/ENG 2000 6.0 prior to 2009) and SC/ENG 1000 6.00. Course credit exclusions: LE/SC/CSE 3000 3.00, LE/SC/CSE 3001 1.00, LE/SC/CSE 3002 1.00, SC/PHYS 3001 1.00, LE/SC/EATS 3001 1.00.	To recognize the roles and responsibilities of a Professional Engineer To practice engineering according of the Professional Engineers Act and professional ethics To explain legal principles related to engineering practice To identify one's learning need(s) and knowledge gaps To present effectively (or, to communicate effectively), in a professional matter, technical AND non-technical contents to wide variety of audience. To recognize and accept individual and cultural diversity
LE/EECS 3000	Professional Practice in Computing	Existing	F	3	Professional, legal and ethical issues in the development, deployment and use of computer systems; their impact on society including privacy and security, computer crime, malware, and intellectual property; professional	Describe the main categories of ethical theories and key ways in which computer technology gives rise to new ethical issues Describe how computing technology affects privacy, the roles and activities of Information and Privacy Commissioners in Canada, the laws they enforce,

					ethics and responsibilities; guest lecturers from industry, government and university. Three lecture hours per week. One term. Three credits. Prerequisites: General Prerequisite. LE/EECS 2030 3.00 or LE/EECS 1030 3.00. Course credit exclusion: LE/SC/ENG 4000 6.00. (NOTE: The General Prerequisite is a cumulative GPA of 4.50 or better over all major EECS courses. EECS courses with the second digit "5" are not major courses.)	and key international efforts (agreements and treaties) to regulate electronic data with a view to maintain Describe how computing technology has impacted, in both positive and negative ways, the exercise of free speech Describe how software is protected under copyright and patent law, how licensing is used, and how the intellectual property regime affects the development of new computing technology (both positive and negative effects) Describe the four criteria required for an invention to be patentable Search the Canadian Patent database for patents satisfying specified criteria Describe the key ways in which computer technology provides new challenges to law enforcement and the key elements of Canadian law that address cybercrime Describe the key characteristics of a profession and the role of professional organisations in establishing and upholding standards of practice and codes of conduct"
LE/ESSE 4000	Research Project	Existing	Y	6	A major written report or thesis on field measurements, laboratory research or computer modelling in the Earth or atmospheric sciences. Work is supervised by a faculty member. Open to exceptional students. Two terms. Six credits. Note: Permission of the department Chair is required.	
5. Tech Project: Utilizing technology to solve problems						
LE/ENG 4000**	Engineering Project	Existing	Y	6	The project will include significant elements of design and	Effectively design a complex product, service or process using the engineering design cycle.

					implementation. The format is intended to resemble engineering projects in practice, including specifications, background research, innovative solutions, analysis, testing and communication. Two terms. Six credits. Prerequisites: 21 3000-level science or engineering credits in the Engineering Program, exclusive of LE/ENG 3000 3.00. Prerequisite or corequisite: LE/ENG 3000 3.00. Prior to Summer 2013: Prerequisites: 21 3000-level science or engineering credits in the Engineering Program, exclusive of SC/ENG 3000 3.00. Prerequisite or corequisite: SC/ENG 3000 3.00. Course credit exclusions: LE/SC/CSE 4080 3.00, LE/SC/CSE 4081 6.00, LE/SC/CSE 4082 6.00, LE/SC/CSE 4084 6.00, LE/SC/CSE 4480 3.00.	Implement engineering solutions that are functional, of high quality meet the design intent. Demonstrate purposeful, methodical and analytical testing and/or evaluation methods Identify any safety risks and apply necessary mitigation measures Communicate and document effectively the engineering designs in a clear and organized manner in various forms including written reports and formal presentation. Demonstrate professional skills in all aspects of the course including responsibility, conduct and competence Demonstrate ability to work effectively in a multi-disciplinary team
LE/EECS 4080	Computer Science Project	Existing	F+W+S	3	A project in computer science chosen in consultation with, and supervised by, a member of the department. Prerequisites: General prerequisite; LE/EECS 2030 3.00 or LE/EECS 1030 3.00; permission of the course director. Normally restricted to students who have taken 36 credits in computer science. Course credit exclusions: LE/EECS 4081 6.00, LE/EECS 4082 6.00, LE/EECS 4084 6.00, LE/EECS 4088 6.00, LE/EECS 4480 6.00, LE/ENG 4000 6.00. Prior to Fall 2014: Course credit exclusions: LE/SC/CSE 4081 6.00, LE/SC/CSE 4082 6.00, LE/SC/CSE 4084 6.00, LE/SC/CSE 4088 6.00, LE/SC/CSE	Communicate and document effectively the project in a clear and organized manner in various forms including written reports and formal presentation. Demonstrate purposeful, methodical and analytical testing and/or evaluation methods. Consult the literature at a developed level, analyze findings and synthesize solutions and processes. Work independently to complete a project relative to the field of inquiry. Communicate and speak, in general, of developing professionalism, and working within formal professional ethics guideline.

					4480 3.00, LE EECS 4700 6.00, LE CSE 4700 6.00, LE/SC/ENG 4000 6.00. (NOTE: The General Prerequisite is a cumulative GPA of 4.50 or better over all major EECS courses. EECS courses with the second digit "5" are not major courses.)	
LE/EECS 4088	Computer Science Capstone Project	Existing	Y	6	A project in computer science chosen in consultation with, and supervised by, a member of the department. Prerequisites: General prerequisite; LE/EECS 2030 3.00 or LE/EECS 1030 3.00; permission of the course director. Normally restricted to students who have taken 36 credits in computer science. Course credit exclusions: LE/EECS 4080 3.00, LE/SC/CSE 4080 3.00, LE/EECS 4081 6.00, LE/SC/CSE 4081 6.00, LE/EECS 4082 6.00, LE/SC/CSE 4082 6.00, LE/EECS 4084 6.00, LE/SC/CSE 4084 6.00, LE/EECS 4480 3.00, LE/SC/CSE 4480 3.00, LE/EECS 4700 6.00, LE CSE 4700 6.00, LE/SC/ENG 4000 6.00. (NOTE: The General Prerequisite is a cumulative GPA of 4.50 or better over all major EECS courses. EECS courses with the second digit "5" are not major courses.)	Communicate and document effectively the project in a clear and organized manner in various forms including written reports and formal presentation. Demonstrate purposeful, methodical and analytical testing and/or evaluation methods. Consult the literature at a developed level, analyze findings and synthesize solutions and processes. Work independently to complete a project relative to the field of inquiry. Communicate and speak, in general, of developing professionalism, and working within formal professional ethics guideline.
LE/EECS 4090	Software Development Capstone Project	Existing	Y	6	Large-scale project involving all stages of the software development life cycle: requirements, analysis and design, implementation, testing and delivery. Team work. Open only to students in the Software Development Stream. Prerequisites: LE/EECS 3311 3.00 (with minimum grade of B), LE/EECS 3101	After successful completion of the course, students are expected to be able to: Describe the requirements of a large software system. Select appropriate system elements for a high-level design description. Derive and implement test cases at the unit and

					3.00, LE/EECS 3342 3.00. Corequisites: LE/EECS 4312 3.00, LE/EECS 4313 3.00.	system level. Produce a detailed user manual for an interactive system. Implement a large software system from scratch.
LE/EECS 4700	Digital Media Project	Existing	Y	6	This course involves the completion of a significant body of work in the area of Digital Media. The project will normally be a team project involving the development and analysis of a digital media work potentially having elements of interactivity, animation, 3-D graphics, and sound for example. The project will be presented at a public workshop towards the end of the year. Prerequisites: Only open to students in the final year of the Digital Media program. Course credit exclusions: LE/EECS 4080 3.00; LE/SC/CSE 4080 3.00; LE/EECS 4081 6.00; LE/SC/CSE 4081 6.00; LE/EECS 4082 6.00; LE/SC/CSE 4082 6.00, LE/EECS 4084 6.00; LE/SC/CSE 4084 6.00, LE/EECS 4088 6.00; LE/SC/CSE 4088 6.00; LE/EECS 4480 3.00; LE/SC/CSE 4480 3.00.	Communicate and document effectively the project in a clear and organized manner in various forms including written reports and formal presentation. Demonstrate purposeful, methodical and analytical testing and/or evaluation methods. Consult the literature at a developed level, analyze findings and synthesize solutions and processes. Work independently to complete a project relative to the field of inquiry. Communicate and speak, in general, of developing professionalism, and working within formal professional ethics guideline.
LE/ESSE 4000	Research Project	Existing	Y	6	A major written report or thesis on field measurements, laboratory research or computer modelling in the Earth or atmospheric sciences. Work is supervised by a faculty member. Open to exceptional students. Two terms. Six credits. Note: Permission of the department Chair is required.	

6. Law: Understanding and applying law tools like intellectual property and Contracts						
LW/LAW 3591*	Legal Values: Commercializing IP	Existing	W	3	Legal issues are crucial to the commercialization of new technologies. This course will focus on issues related to the creation, development, protection and exploitation of intellectual property rights as a business asset for both high-growth start-ups and established businesses. We will examine the entire process of creating, capturing, protecting, leveraging and transferring technology and ideas, including internal strategies designed to incent scientists and engineers engaged in innovation and idea generation; deciding whether, what, where, and how to obtain IP registrations and the related economics; the development of a commercialization strategy (such as selecting the target market and application for the idea) and business model; drafting and negotiation of technology transfer/licensing agreements; offensive and defensive IP strategies; assessing competitive IP; negotiating and interpreting IP sensitive contracts ; transactional IP processes, with discussion on emerging markets; and key technology specific legal issues relating to software, digital communications and data processing, mobile devices and social media, financial services and life sciences. The course will also address the	

					financing options available to the high-growth start-up, including crowd-sourcing and other modern financing techniques, as well as a general overview of pertinent tax and structural topics. Media coverage of current developments will be introduced to enrich class discussions. This course will leverage the experiences and challenges from leading experts in the field and employ a variety of case-studies, including one of Ontario's largest angel-funded start-up organizations, PharmaTrust (now MedAvail), a rapid-growth start-up in the pharmacy automation business. While students with some background in substantive areas are welcome, no prior experience in these areas is required. Of course it goes without saying that a keen enthusiasm to learn about IP issues and participation in the course are encouraged by the instructors. All IP Osgoode Innovation Clinic students are required to enrol in this course.	
7. Business: Fundamental business principles for success and sustainability						
SB/ENTR 3400*	Business Essentials for Technology Entrepreneurs I	Existing	F	3	This course has three modules: Organizational Behavior develops skills/knowledge of leadership, teamwork, negotiations and motivation. Marketing presents	Understand the benefits and limits of team decision making. Understand and apply the principles of motivation and reward systems.

					marketing strategy fundamentals. Operations Management reviews business processes to maximize supply under resource constraints. Prerequisite: completion of 30 engineering credits. Note: Open to students in the Lassonde School of Engineering or by permission of the instructor and Lassonde Student Services.	Learn and practice effective negotiation skills. Develop a reflexive awareness of one's own strengths and weaknesses. Practice effective communication and teamwork.
SB/ENTR 3600*	Business Essentials for Technology Entrepreneurs II	Existing	W	3	This course has three modules: Accounting presents financial accounting fundamentals for business planning; Finance presents finance fundamentals to enable fund raising and resource allocation decisions; Strategy explores competitive analysis and strategic planning. Prerequisite: completion of 30 engineering credits. Note: Open to students in the Lassonde School of Engineering or by permission of the instructor and Lassonde Student Services. Former prerequisite: completion of 60 credits in the major.	For the <i>Accounting Module</i>: Understand the accounting processes Translate economic information into accounting data Understand the structure of financial statements Read and critically analyze financial reports Create the full set of financial reports required for a business plan Use accounting information as a tool for refining a firm's business model For the <i>Finance Module</i>: Understand future and present values Calculate net present values and internal rates of return Understand the difference between real and nominal cash flows and interest rates Compare among projects' value Identify relevant data for calculating cash flows Apply accounting information in cash flow analysis Perform sensitivity analysis Understand the advantages and disadvantages in

						debt and equity financing Understand the advantages and disadvantages of the various valuation methods Evaluate new business ventures For the <i>Strategy Module</i>: Understand what strategy is and how it creates value for the firm's shareholders Integrate and synthesize various perspectives to formulate a coherent firm strategy Analyze the competitive environment of an organization Assess whether a company possesses the right mix of resources and capabilities to compete successfully Learn how managers can leverage their resources and capabilities across several markets or industries Put strategy into action by designing structures that are congruent with each other and with the overall strategy of the firm Compare among different strategic options, while taking into account the threats and opportunities facing the organization Understand how organizations create and capture value
SB/ENTR 4500*	Entrepreneurship and Technology Ventures	Existing	W	3	This course brings forward the challenges and opportunities facing an entrepreneur creating a technology start-up. Students turn an idea into an enterprise by focusing on what customers want. Note: open to Year 4 BBA/iBBA students, students who have completed 60.00 engineering credits in	Understanding why entrepreneurship matters. Developing and assessing your business idea. Protecting that idea and the resulting business venture. Understanding the importance of using the right business model for your offering. Making that offering what the market wants. Assessing whether or not your venture is financially

					the Lassonde School of Engineering, or students with instructor permission. Course Credit Exclusion: SB/ENTR 4600 3.00	viable. Understanding what investors are looking for and how to make a pitch. Understanding how to scale up the startup as well as how to exit an entrepreneurial career. Assessing whether an entrepreneurial career is for you.
8. Experiential (optional): Opportunities for experiential entrepreneurship						
LE/MECH 3033*	International Entrepreneurial Engineering Immersion	Existing	S	3	This course is designed to provide a true renaissance approach to engineering students' education by immersing them in an international culture where they are challenged to identify important problems that can be addressed through the novel deployment of technology. While this course can be seen as an entrepreneurial course, it is primarily a course to help students look at different approaches to creative problem solving and design thinking. The course provides students with a number of frameworks, tools and workshop experiences to prepare them for their international experience, which they then deploy while on their international assignment. While the course is primarily for Lassonde students, a number of places will be offered for students from other Faculties working with the BEST program. The course consists of pre-travel workshops, interactive lessons and workshops on location (both on the	Apply a design thinking approach to a specific problem or situation – linked to investigation and design Apply experiential learning techniques in the entrepreneurial context – linked to life-long learning Employ basic tools of innovation, creativity and problem solving to solve societal problems – linked to impact of engineering on society Develop, use and interpret their own learning journal to learn about themselves.- linked to individual work Demonstrate the ability to adapt their own roles in a group in order to enhance team effectiveness – linked to team work Deliver professional business pitch to convey business plans and/or innovative ideas – linked to communication skills

					campus of academic partners and through site visits to companies, incubators and investors). In addition, students will be required to work extensively in groups on developing a technology solution to an important problem, and make final presentation to local investors and entrepreneurship support organizations. Following the international trip, students must participate in workshops and presentations at Lassonde, to share the lessons learned both with professors and each other. It is intended that there are a number of optional destinations for this course, and consequently a number of partner institutions engaged in the delivery of material at the destination. Before trip - 12 contact hours. During trip - 28 contact hours. After trip - 6 contact hours. Note that in addition to contact hours, students will be expected to work on their own or in teams for about 20 hours while overseas and four hours once back in Canada. Prerequisites: Permission by course instructor through formal application process (see Appendix C for details) and may include an interview.	
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Appendix C: Overview of Relevant University Undergraduate Certificate Guidelines

This Certificate is designed to comply with the Universities Undergraduate Certificate Guidelines

(<http://secretariat-policies.info.yorku.ca/policies/undergraduate-certificates-guidelines-and-procedures/>)

This is a cross disciplinary undergraduate certificate according to the definitions in that document:

Definition: "Undergraduate Certificate" is the term applied to a program of studies attesting to a level of competence or skills in a particular area or field. It is distinct from a defined undergraduate degree program, stream, specialization or informal concentration. A certificate recognizes a specific grouping of courses that i) are cross-disciplinary but with a thematic coherence, ii) form a coherent yet distinctive complement to the major of a degree program, or
iii) lead to the acquisition of specific skills or professional expertise that may meet requirements of outside accrediting bodies.

Definition: “Cross-Disciplinary Certificate” is the term applied when the certificate is based on a cluster of courses in a defined thematic area of interest, which are not confined to a single disciplinary area of study or major.

Minimum Standards: 24 credits, at least 18 of which must be at the 2000-level or above, including 6 credits at the 3000- or 4000-level. In order to receive the certificate candidates must present a cumulative grade point average (GPA) of 4.0 or greater in the courses taken to satisfy certificate requirements.

Appendix D: References

Abramovich, S., Schunn, C., & Higashi, R. M. (2013). Are badges useful in education?: it depends upon the type of badge and expertise of learner. *Educational Technology Research and Development*, 61, 217- 232.

Duval-Couetil, N., Reed-Rhoads, T., & Haghighi, S. (2012). Engineering students and entrepreneurship education: Involvement, attitudes and outcomes. *International Journal of Engineering Education*, 28(2), 425.

Gibson, D., Ostashewski, N., Flintoff, K., Grant, S., & Knight, E. (2013). Digital badges in education. *Education and Information Technologies*, 20(2), 403-410.

Glover, I. (2013). Open badges: A visual method of recognising achievement and increasing learner motivation. *Student Engagement and Experience Journal*, 2(1).

Lemoine, P. A., & Richardson, M. D. (2015). Micro-Credentials, Nano Degrees, and Digital Badges: New Credentials for Global Higher Education. *International Journal of Technology and Educational Marketing (IJTEM)*, 5(1), 36-49.

APPENDIX E: BEST Cross-Disciplinary Certificate - Calendar Copy

The Cross-Disciplinary Bergeron Entrepreneurs in Science & Technology (BEST) Certificate integrates technology, law and business into creative problem-solving and innovation and is designed to teach, promote, focus and recognize student entrepreneurial skills and knowledge. The BEST Certificate incorporates multidisciplinary courses from various Faculties across the University (namely, Lassonde, Schulich School of Business and Osgoode Hall Law School) that teach the essential entrepreneurship skills identified and listed as eight separate themes in **Table 1**. By concentrating all these skill outcomes into a well-defined and structured pathway, the BEST Certificate acts as an effective roadmap which students navigate throughout their degree, ultimately leading to either (1) starting their own ventures, or (2) playing a greater role in the management of technological innovation in larger organizations.

Table 1: The themes comprising the BEST Certificate and associated essential skills outcomes.

THEME	SKILL OUTCOME
1. Innovation	Appreciation for innovation and problem-solving
2. Communication	Effective communication strategies to convey often complex problems and solutions
3. Design	Awareness and implementation of design thinking principles
4. Professionalism	Integrity, professionalism and ethics in business
5. Tech Project	Utilizing technology to solve problems
6. Law	Understanding and applying law tools like intellectual property and Contracts
7. Business	Fundamental business principles for success and sustainability
8. Optional (experiential)	Opportunities for experiential entrepreneurship

The opportunity to earn the BEST Certificate will motivate students to focus their General Education studies in our BEng, BSc and BA honours degree programs (complementary studies in the BEng degree) in entrepreneurship. The BEST Certificate is a concrete way that allows Lassonde to integrate a formal academic program in entrepreneurship and better train and empower post-millennial students in securing employment or creating their own employment. This certificate is currently only open to Lassonde students. (Note: Thematic course structures of the certificate are currently being developed for other degree programs at York.)

REQUIREMENTS

Students are required to complete 27 credits in a series of courses from seven core Entrepreneurship Themes, and one additional theme is optional, as follows:

- A minimum of 3 credits from each of the 7 mandatory core themes;
- 18 credits must be taken at the 2000-level or above;
- 12 credits must be taken in cross-disciplinary courses (Business & Law Themes);
- Students must have a cumulative GPA of 5.0 upon graduation

Courses for Lassonde BEng Students:

A minimum of 3 credits taken from each of the 7 mandatory core themes below:

THEMES	BEngSTREAM	COURSE TITLE
1. INNOVATION	LE/ENG 1101 4.0*	Renaissance Engineering 1: Ethics, Communication & Problem
2. COMMUNICATION	LE/ENG 2003 3.0 LE/ESSE 2360 3.0 LE/ESSE 2361 3.0	Effective Engineering Communication Fundamental of Space Engineering Space System Engineering
3. DESIGN	LE/ENG 1102 4.0 LE/CIVL 2000 3.0 LE/EECS 2311 3.0 LE/MECH 2412 3.0 LE/MECH 3401 3.0 LE/ESSE 4360 3.0 LE/ESSE 4361 3.0 LE/ESSE 4600 3.0 LE/ESSE 4620 3.0	Renaissance Engineering 2: Engineering Design Principles Mini Civil Engineering Design Project Software Development Project Mini Design Project 1 Mini Design Project 2 Payload Design Space Mission Design Geographical Information Systems (GIS) and Data Integration Physical and Space Geodesy
4. PROFESSIONALISM	LE/ENG 3000 3.0	Professional Engineering Practice
5. PROJECT	LE/ENG 4000 6.0	Engineering Projects
6. LAW	LW/LAW 3040 3.0	Perspectives: Commercializing IP
7. BUSINESS	SB/ENTR 3400 3.0 SB/ENTR 3600 3.0 SB/ENTR 4500 3.0	Business Essentials for Technology Entrepreneurs I Business Essentials for Technology Entrepreneurs II Entrepreneurship and Technology Ventures
8. OPTIONAL (experiential)	LE/MECH 3033 3.0 Co-op	International Entrepreneurial Experience Co-op

Courses for Lassonde BSc (Hon) and BA (Hon) students:

A minimum of 3 credits taken from each of the 7 mandatory core themes below:

THEMES	BSc & BA (Hon) Stream	COURSE TITLE
1. INNOVATION	LE/EECS 1012 3.0 LE/ENG 1500 3.0	Neo-Centric Introduction to Computer Innovation & Creativity
2. COMMUNICATION	AP/COMN 1000 6.0	Introduction to Communications
3. DESIGN	LE/EECS 3311 3.0 LE/EECS 2311 3.0 LE/ESSE 2630 3.0 LE/ESSE 4660 3.0	Software Design Software Development Project Field Surveys Cadastral Surveys and Land Registration Systems
4. PROFESSIONALISM	LE/EECS 3000 3.0 LE/ESSE 4000 6.0*	Professional Practice in Computing Research Project
5. PROJECT	LE/EECS 4080 3.0 LE/EECS 4088 6.0 LE/EECS 4090 6.0 LE/EECS 4700 6.0 LE/ESSE 4000 6.0*	Computer Science Project Computer Science Capstone Project Software Development Capstone Project Digital Media Project Research Project
6. LAW	LW/LAW 3040 3.0	Perspectives: Commercializing IP
7. BUSINESS	SB/ENTR 3400 3.0 SB/ENTR 3600 3.0 SB/ENTR 4500 3.0	Business Essentials for Technology Entrepreneurs I Business Essentials for Technology Entrepreneurs II Entrepreneurship and Technology Ventures
8. OPTIONAL (experiential)	LE/MECH 3033 3.0	International Entrepreneurial Experience

MEMO

TO Lisa Farley, Chair, Senate Committee on Academic Standards, Curriculum & Pedagogy

FROM Janusz Kozinski, Founding Dean, Lassonde School of Engineering

SUBJECT BEST Certificate

DATE February 6, 2017



It gives me great pleasure to offer my enthusiastic support for the proposal for the Bergeron Entrepreneurs in Science and Technology (BEST) certificate in Technology Entrepreneurship. This new certificate plays a pivotal role in the series of new offerings that the Lassonde School of Engineering will be introducing under its transformative plans for engineering at York. It represents a natural next step in the expansion of York's BEST Lab.

The certificate development was informed by a careful planning phase, involving consultations with internal colleagues, external consultants and expert colleagues, as well as benchmarking against leading certificates in Canada and the US. The initiative is fully aligned with the strategic directions of the Lassonde School of Engineering and the University. Our strategic planning envisions a multi-phase development for Engineering at York, in which BEST features prominently as a cornerstone. The proposal is also aligned with the principal goals of the most recent University Academic Plan and the Provostial White Paper, which call for expansion of the scope of the University's teaching activities in the areas of engineering and applied science. The launch of this certificate provides a collaborative and pan-university approach to engaging students across the university in entrepreneurial, science and technology activities, along with opportunities for experiential education.

The academic financial resources and planning processes for this certificate are imbedded in the very stringent planning and accountability framework designed at Lassonde. The only net new resources that would be leveraged for the offering of this certificate will be in the offering of a new course ENG 1500 3.0 Innovation & Creativity, with the administration of the certificate to be taken up collaboratively by the Director and Associate Director of BEST, along with our Student Advising team.

In conclusion, I am pleased to offer my strong support for the introduction of this certificate into the Lassonde School of Engineering.



Office of the Dean

2026 IGNAT KANEFF BLDG.
4700 KEELE ST
TORONTO ON
CANADA M3J 1P3
T 416 736 5199
lawdean@osgoode.yorku.ca
www.osgoode.yorku.ca

January 31, 2017

The Senate
York University,
Toronto,
Ontario

**RE: Undergraduate Cross-Disciplinary Certificate in Technology
Entrepreneurship (BEST Certificate)**

To whom it may concern:

I am delighted to write a letter in support of the Lassonde School of Engineering proposal to create a new undergraduate cross-disciplinary certificate in technology entrepreneurship, which is now being submitted to the Senate for approval. Osgoode Hall Law School has been supporting Lassonde students for several years already by providing them access to Osgoode's *Legal Values: Commercializing IP* course and free patenting services at the *IP Osgoode Innovation Clinic*. Ongoing close ties between IP Osgoode faculty members and Lassonde Bergeron Entrepreneurs in Science and Technology (BEST) Initiative is at the heart of this vital partnership.

Osgoode Hall is keen to continue to support Lassonde in developing its entrepreneurship program and further strengthening the partnership.

I fully support the efforts of the Lassonde School of Engineering, as they seek approval of this BEST Certificate, which I believe will enhance the student experience at Lassonde.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lorne Sossin".

Lorne Sossin
Dean





The Senate
York
University
Toronto, Ontario.

January 30, 2017.

**FACULTY OF
LIBERAL ARTS &
PROFESSIONAL STUDIES**

**Department of
Communication Studies**

3004 TECHNOLOGY
ENHANCED
LEARNING BLDG.
4700 KEELE ST.
TORONTO ON
CANADA M3J 1P3
T 416 736 5057
F 416 736 5392
lapscomn@yorku.ca
www.yorku.ca/laps/comn

I am pleased to write this letter in support of the proposal for the Bergeron Entrepreneurs in Science and Technology (BEST) undergraduate cross-disciplinary certificate in technology entrepreneurship. The Certificate integrates various academic curricula into rigorous entrepreneurship training and one area highlighted in the Certificate is Communication.

The Department of Communication Studies looks forward to contributing to this exciting cross-disciplinary initiative. It is of particular interest to me as I am the Course Director of AP/COMM 1000 – Introduction to Communications which is already available to Lassonde students. Consequently, I would like to add my support to the Certificate and grant permission to use my course as a required course for fulfilling Communication requirements.

Both the Department of Communication Studies and I welcome the opportunity to help Lassonde students strengthen their entrepreneurial skills through better understanding the institutions and processes of communication and becoming more effective communicators.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. Skinner', enclosed within a large, loopy oval shape.

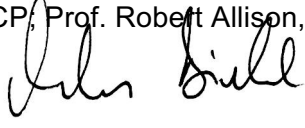
David Skinner, Ph.D.
Associate Professor and
Chair





Schulich
School of Business
York University

Memorandum

To: Professor Terry Sachlos, Assoc. Director, BEST, Lassonde
CC: Cheryl Underhill, Senate ASCP, Prof. Robert Allison, Vice Dean, Lassonde
From: Markus Biehl, AD Academic 
Date: February 8, 2016
Subject: Proposal for BEST Certificate in Technology Entrepreneurship

OFFICE OF THE DEAN

**Associate Dean
Academic**

4700 KEELE ST.
TORONTO ON
CANADA M3J 1P3

T 416 736 5097
F 416 736 5762

ada@schulich.yorku.ca
ada.schulich.yorku.ca

On behalf of the Schulich School of Business, I 'm delighted to support the proposal for the Bergeron Entrepreneurs in Science and Technology (BEST) undergraduate cross-disciplinary certificate in technology entrepreneurship. The Schulich School of Business and the Lassonde School of Engineering have already been working closely for several years in nurturing entrepreneurship. The development of this Certificate is a natural evolution.

The certificate requires students to take business foundation and entrepreneurship courses (SB/ENTR 3400, 3600, 4500) in addition to courses in Law and different aspects of Engineering. Schulich will continue to support these business components and is interested in further collaborating with Lassonde in enriching the student experience, particularly with regards to entrepreneurship.

I congratulate the Lassonde School of Engineering on an exciting proposal.

Office of the Vice-President Academic and Provost

Memorandum

To: L. Jacobs, Chair, Senate APPRC
L. Farley, Chair, Senate ASCP

From: Rhonda Lenton, Vice-President Academic & Provost 

Date: February 6, 2017

Subject: BEST Certificate, Lassonde School of Engineering

I have reviewed the proposal from the Lassonde School of Engineering to establish a cross-disciplinary undergraduate certificate – the Bergeron Entrepreneurs in Science and Technology (BEST) Certificate. The certificate will draw together and recognize on the transcript a structured pathway of courses, designed to provide students with skills and knowledge that will prepare them to pursue entrepreneurial opportunities. This proposal responds to student demand for career-related programming, and builds on the vision of LSE and the BEST initiative; it is also aligned with institutional objectives around the expansion of engineering opportunities at York. It is anticipated that the availability of the certificate will contribute to Lassonde's differentiation and profile.

The BEST certificate, which will be pursued as part of the degree programs offered in LSE, comprises courses in engineering/technology, business, and law that will provide students with skills in seven areas: innovation, communication, design, professionalism, technical, law, and business; students may also include an experiential education component. Students will take a total of 27 credits to earn the certificate, including at least three credits in each skill area, with 12 credits from the business and law areas. At the outset, this certificate will be available only to Lassonde students, but there may be opportunities to expand availability to other Faculties in the future. It is my understanding that the certificate will be awarded to graduating Lassonde students as of June 2019.

Faculty and courses are already in place to introduce the certificate in LSE, with the exception of one new course currently in development. The certificate will be administered by the BEST director and staff, in collaboration with the School's advising staff. Initial funding for the BEST initiative was provided by a donation from Doug and Sandra Bergeron. The Dean has confirmed that no further net new resources will be

Office of the Vice-President Academic and Provost

required to implement this initiative; and the proposal indicates that, should additional resources be required in the future, they would be funded by the Dean's office.

I am pleased to record my support for this initiative.

Cc: Dean J. Kozinski

Major Modifications Proposal – Bachelor of Arts, Educational Studies

1. **Program:** Educational Studies
 2. **Degree Designation:** Bachelor of Arts
 3. **Type of Modification:** Changes to course offerings, changes to program requirements for the Honours BA, and the addition of a 90-credit BA degree option.
 4. **Effective Date:** September 2017
-

5. Provide a general description of the proposed changes to the program.

We are proposing three changes that impact program requirements and add a new program option:

- a. Revising the list of courses in the degree program — to create a slightly smaller but adequate set of stand-alone courses (EDST) and to eliminate the enrolment of BA students in BEd (EDUC) courses.
- b. Revising the Major requirements to simplify students' progression through the degree; we are not increasing or decreasing the number of credits required, simply adjusting the list of courses from which those credits can be selected.
- c. Adding a 90-credit (delayed-entry) degree option.

6. Provide the rationale for the proposed changes.

- a. **Revising the list of courses:** Having offered the degree for the first time this academic year, we have learned a great deal about the students who are interested in and enrolling in our program. The majority of these students are interested, not only in the BA in Educational Studies, but also in completing the Bachelor of Education leading to teacher certification. Many of these students applied to the BEd through Direct Entry when they applied for the BA. As a result, it seems more important than ever that we distinguish these two degree programs and eliminate overlap between them. Originally, the BA had shared some courses with the BEd, and we are now seeking to create a list of courses exclusive to the BA, so that students will not confuse the BA with the BEd. The list has been revised by removing some courses that overlap with the BEd and by creating EDST versions of some EDUC courses.
- b. **Revising the Major requirements:** We propose streamlining the Major requirements (without modifying the number of credits required) to bring them more in line with other comparable Honours BA programs at York. This alignment will increase the ease of mounting courses and, most importantly, improve the ease with which students can move through the degree. Originally, students were required to take a certain number of credits from courses listed under three thematic areas: Representations, Engagements, and Values. We

feel this requirement adds unnecessary complications for students planning their degree program. Instead, by simply requiring a certain number of 2000, 3000 and 4000 level courses, as other degree programs do, students will have fewer requirements to keep track of and yet will inevitably take courses across the three thematic areas as originally intended.

- c. **Adding a 90-credit (delayed-entry) degree option:** We propose to add the 90-credit degree option to give our current and prospective students in Educational Studies more options for degree completion. Adding this option will increase access to our BA degree for populations who may not need to or who may not be able to complete the 120-credit Honours degree.

7. Comment on the alignment between the program changes with Faculty and/or University academic plans.

These proposed changes are aligned with the University Academic Plan (2015-20). They reflect a Student-Centred Approach (Priority 4) to program delivery and implementation by aiming to increase student satisfaction. The proposed changes respond to our growing awareness of student learning needs in this newly-implemented degree program and our desire to improve student experience and academic supports. In addition, the elimination of overly complex degree requirements responds specifically to the call for Innovative, Quality Programs for Academic Excellence (Priority 1). The addition of the 90-credit degree option also enhances “the flexibility and empowerment of students” by positively affecting access to our degree program for underrepresented groups and increasing the flexibility of degree options for all students.

8. Provide a detailed outline of the changes to the program and the associated learning outcomes, including how the proposed requirements will support the achievement of program learning objectives (i.e., the mapping of the requirements to the program learning outcomes).

The proposed changes do not have an impact on the Honours program learning outcomes. The requirements have not substantively changed, but have been simplified to support student retention and success. Specific changes include:

Revising the list of courses: The following EDUC courses have been removed from the list of BA, Educational Studies course offerings in order to avoid confusion between the two degree programs:

EDUC 2300 Pedagogy of the Land
EDUC 2400 Education as Communication
EDUC 2720 Teaching English in International Contexts
EDUC 3300 Urban Education
EDUC 3500 Inclusive Education
EDUC 3600 Literacy and Culture
EDUC 3610 New Media Literacies and Culture

EDUC 3650 The Psychoanalysis of Teaching and Learning
EDUC 3710 Global Issues and Education
EDUC 3750 Educational Assessment
EDUC 3770 Teaching and Learning with Digital Technologies
EDUC 3900 Studies in Popular Culture
EDUC 3910 Reflecting on and Interpreting the International Educational Experience

We have created the following EDST versions of formerly EDUC courses in order to maintain a robust and diverse selection of Educational Studies course offerings (see Appendix A for complete list of EDST courses):

EDST 2200 Issues in Indigenous Education
EDST 2700 Teaching Internationally and Interculturally
EDST 3700 Educating for a Sustainable Future: A Multidisciplinary Approach
EDST 3720 Philosophical Inquiry into Critical Thinking and Curriculum
EDST 3730 Education and Human Rights
EDST 3760 Early and Family Literacy

Revising Major requirements: First, the proposed language and organization of the program requirements has been simplified and brought into line with comparable programs at York in order to facilitate the communication and understanding of these requirements for students. Second, the existing Major credit requirements for the Honours BA (42 EDST credits in total), in addition to a list of required courses, specify that students have to select “a minimum of 9 credits from each of Course lists 1, 2 and 3.” The EDST course offerings are then broken down into lists under three thematic headings: Engagements, Representations and Values. While we have preserved the thematic organization of the program and course lists, which we understand to be integral to its comprehensiveness, we propose to simplify the Major requirements by removing the requirement that students do a minimum number of credits from each course list. We feel confident that this proposed change will not jeopardize the likelihood that students will take courses in all three thematic areas (see Appendix B for complete Major credit requirements).

Adding a 90-credit (delayed-entry) degree option: We have modeled our proposed 90-credit degree option on other comparable undergraduate social sciences degrees at York. As such, Major credit requirements for the BA (30 EDST credits in total) are similar to the Minor credit requirements for the Honours BA. The Major credit requirements in the BA include four required courses (compared to five in the Honours BA) and an upper-level credit requirement of at least 12 credits at the 3000 or 4000 level (compared to 12 credits at the 4000 level for the Honours BA) (see Appendix B for complete BA requirements).

9. Summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs.

Consultation on these changes has occurred within our Faculty, led by the Associate Dean, Academic Programs, with tenure-stream colleagues, the Undergraduate Program Director, the Director of Academic Affairs and Operations, and the Dean. The proposed changes will not affect any other academic units.

10. Are changes to the program's admission requirements being proposed coincident with the program change(s)?

The admission requirements are not changing.

11. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

No additional resources are required for either the new degree option of the requirement changes.

12. Is the mode of delivery of the program changing? If so, comment on the appropriateness of the revised mode(s) of delivery to the achievement of the program learning outcomes.

No changes to the mode of delivery of the program are proposed.

13. Is the assessment of teaching and learning within the program changing? If so, comment on the appropriateness of the revised forms of assessment to the achievement of the program learning outcomes.

No.

14. Provide a summary of how students currently enrolled in the program will be accommodated.

Students currently enrolled in the program will be able to take advantage of the revised, simplified Major requirements and/or the 90-credit degree option. If they wish to complete the degree under the original requirements, they may do so.

15. Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.

Calendar copy has not been copied for Senate; it is on file in the Secretariat for review upon request.

APPENDIX A: Revised Course Offerings Educational Studies		
Engagements	Representations	Values
ED/EDST 1100 3.0 Situated Learning and Education	ED/EDST 1200 3.0 Place and Learning	ED/EDST 1000 3.0 What is Education For?
ED/EDST 2450 3.0 Multilingualism and Multiculturalism in Educational Contexts	ED/EDST 2500 3.0 Cultural Representations of Education	ED/EDST 2200 3.0 Issues in Indigenous Education
ED/EDST 3720 3.0 Philosophical Inquiry into Critical Thinking and Curriculum	ED/EDST 3100 3.0 Recreation and Education	ED/EDST 2700 3.0 Teaching Internationally and Interculturally
ED/EDST 3760 3.0 Early and Family Literacy	ED/EDST 3400 3.0 Policy and Public Educational Institutions	ED/EDST 3700 3.0 Educating for a Sustainable Future: A Multidisciplinary Approach
ED/EDST 3200 3.0 Apprenticeship Learning and Learning Communities	ED/EDST 3800 3.0 Research Methods in Educational Studies	ED/EDST 3730 3.0 Education and Human Rights
ED/EDST 3999 3.0 Experience, Inquire, Contribute (EIC): Learning in Context		
ED/EDST 4010 3.0 Educating for Activism	ED/EDST 4000 3.0 Community Organizations and Education	ED/EDST 4020 3.0 The Politics Of Social Transformation: Studies Of Great And Not-So-Great Educators
ED/EDST 4100 3.0 Theories, Strategies, and Challenges of Group Work	ED/EDST 4040 3.0 The Nature and Responsibility of Professional Practice	ED/EDST 4300 3.0 Policy and Practice
	ED/EDST 4200 3.0 Creating Curriculum	ED/EDST 4500 3.0 Ethics and Educating in Community and Work Contexts
ED/EDST 4999 3.0 Experience, Inquire, Contribute (EIC): Learning in Context		

APPENDIX A: UUDLES

General Degree Level Expectations for the BA (Educational Studies)	
Expectation	General Realization within the BA (Educational Studies)
1. Depth and Breadth of Knowledge	a) a developed knowledge and critical understanding of the key concepts, methodologies, theoretical approaches and assumptions in educational studies b) a developed understanding of many of the major areas of study within educational studies, including how these areas are informed by disciplines such as social work, sociology, linguistics, equity studies, community studies, work and society c) a developed ability to: i) gather, review, evaluate and interpret information; and ii) compare the merits of alternate hypotheses or creative options within different educational studies social, political and pedagogical contexts d) a developed, detailed knowledge of and experience in research in educational studies in general and within specific learning engagement contexts in particular e) developed critical thinking and analytical skills inside and outside educational studies f) the ability to apply learning from educational studies to a wide variety of situations
2. Knowledge of Methodologies	a) an understanding of methods of enquiry and creative activity in educational studies to enable the student to: i) evaluate the appropriateness of different approaches to solving problems related to theoretically and empirically defensible ideas and strategies in education; ii) devise and sustain arguments relating to pedagogy using these methods; and iii) describe and comment upon particular aspects of research and scholarship relating to educational studies.
3. Application of Knowledge	a) the ability to review, present and critically evaluate qualitative and quantitative information to: i) develop lines of argument; ii) make sound judgments in accordance with the major theories, concepts and methods of educational studies; iii) apply underlying concepts, principles, and techniques of analysis, both within and outside educational studies; iv) use this knowledge in considering issues related to pedagogical provisioning or specific educational problematics and situations; and b) the ability to use a range of established techniques to: i) initiate and undertake critical evaluation of arguments, assumptions, abstract concepts and information; ii) propose solutions; iii) frame appropriate questions for the purpose of solving a problem; iv) solve a problem, or create a pedagogical approach/curriculum that is sensitive to context; and c) the ability to make critical use of scholarly reviews and primary sources.
4. Communica-	a) the ability to communicate information, arguments, and analyses accurately and reliably, orally and in writing to a range of audiences, adapting material in

tion Skills	terms of genres and modalities used to suit different audiences and purposes of communication
5.Awareness of Limits of Knowledge	an understanding of the limits to their own knowledge and ability, and an appreciation of the uncertainty, ambiguity and limits to knowledge and how this might influence analyses and interpretations.
6. Autonomy and Professional Capacity	a) qualities and transferable skills necessary for further study, employment, community involvement and other activities requiring: i) the exercise of initiative, personal responsibility and accountability in both educational studies contexts; ii) working effectively with others; ii) decision-making in complex educational contexts b) the ability to manage their own learning in changing circumstances, both within and outside the educational studies and to select an appropriate program of further study; and c) behavior consistent with academic integrity and social responsibility

APPENDIX B: UUDLES MAPPING – HONOURS BA, EDUCATIONAL STUDIES

Matrix of UUDLES in Relation to Individual Courses in Honours BA (Ed Studies)						
	<i>Expectation Categories</i>					
Course	Depth & Breadth of Knowledge (A,B,C,D,E,F)	Knowledge of Methodologies (A)	Application of Knowledge (A,B,C)	Communication Skills ¹ (A)	Awareness of Limits of Knowledge (A)	Autonomy and Professional Capacity (A,B,C)
ED/EDST 1000	A,C,E,F	A	A,B,C	A	A	A,B
ED/EDST 1100	A,B,C		A,B,C	A	A	A
ED/EDST 1200	A,B,C,D,E	A	A,B	A	A	A,B
ED/EDST 2200	A,B	A	A,B,C		A	A,B,C
ED/EDST 2450	A,B,C,D,E		A,B,C			A,B
ED/EDST 2500	A,B,C,D,E,F	A	A,B	A		A
ED/EDST 2700		A	A,B,C			A,B,C
ED/EDST 3100	A,C,D,E,F	A	A,B	A		A,B
ED/EDST 3200	A		A,B,C	A		A,B,C
ED/EDST 3400	A,C	A	A,B,C		A	A,B,C
ED/EDST 3700	A,B	A	A,B,C			A,B,C
ED/EDST 3720	A,B					A,B,C
ED/EDST 3730	A,B					A,B,C
ED/EDST 3760			A,B,C			
ED/EDST 3800	A,B,C	A	A,B,C	A	A	A,C
ED/EDST 3999	C		A,B,C	A		A,B,C
ED/EDST 4000	A,B,C,E	A	A,B,C	A		A
ED/EDST 4010	A,C,E,F		A,B,C	A	A	A,B,C
ED/EDST 4020	A		A,B	A	A	B

¹ It should be noted that generally all courses foster communication skills in that typically students are involved in crafting papers, presentations and the like. The ones which have a specific UUDLE listed are those which pay particular attention to the area of communicating to varied audiences as per the BA UUDLE.

ED/EDST 4040	A,B,C	A	A,B,C		A	A,B,C
ED/EDST 4100	A	A	A,B,C	A	A	A,B,C
ED/EDST 4200	A,C,E,F	A	A,B,C	A		A,B,C
ED/EDST 4300	A,B,C	A	A,B,C		A	A,B,C
ED/EDST 4500	A,B		A,B,C		A	A,B,C
ED/EDST 4999	C		A,B,C	A		A,B,C

APPENDIX C: UUDLES MAPPING – BA, EDUCATIONAL STUDIES

Matrix of UUDLES in Relation to Individual Courses in BA (Ed Studies)						
Course	Expectation Categories					
	Depth & Breadth of Knowledge (A,B,C,D,E ,F)	Knowledge of Methodologies (A)	Application of Knowledge (A,B,C)	Communication Skills ² (A)	Awareness of Limits of Knowledge (A)	Autonomy and Professional Capacity (A,B,C)
ED/EDST 1000	A,C,E,F	A	A,B,C	A	A	A,B
ED/EDST 1100	A,B,C		A,B,C	A	A	A
ED/EDST 1200	A,B,C,D,E	A	A,B	A	A	A,B
ED/EDST 2200	A,B	A	A,B,C		A	A,B,C
ED/EDST 2450	A,B,C,D,E		A,B,C			A,B
ED/EDST 2500	A,B,C,D,E, F	A	A,B	A		A
ED/EDST 2700		A	A,B,C			A,B,C
ED/EDST 3100	A,C,D,E,F	A	A,B	A		A,B
ED/EDST 3200	A		A,B,C	A		A,B,C
ED/EDST 3400	A,C	A	A,B,C		A	A,B,C
ED/EDST 3700	A,B	A	A,B,C			A,B,C
ED/EDST 3720	A,B					A,B,C
ED/EDST 3730	A,B					A,B,C
ED/EDST 3760			A,B,C			
ED/EDST 3800	A,B,C	A	A,B,C	A	A	A,C
ED/EDST 3999	C		A,B,C	A		A,B,C
ED/EDST 4000	A,B,C,E	A	A,B,C	A		A
ED/EDST 4010	A,C,E,F		A,B,C	A	A	A,B,C
ED/EDST 4020	A		A,B	A	A	B
ED/EDST 4040	A,B,C	A	A,B,C		A	A,B,C

² It should be noted that generally all courses foster communication skills in that typically students are involved in crafting papers, presentations and the like. The ones which have a specific UUDLE listed are those which pay particular attention to the area of communicating to varied audiences as per the BA UUDLE.

ED/EDST 4100	A	A	A,B,C	A	A	A,B,C
ED/EDST 4200	A,C,E,F	A	A,B,C	A		A,B,C
ED/EDST 4300	A,B,C	A	A,B,C		A	A,B,C
ED/EDST 4500	A,B		A,B,C		A	A,B,C
ED/EDST 4999	C		A,B,C	A		A,B,C

Change to Program/Graduate Diploma Academic Requirements Proposal Form

The following information is required for all proposals involving a minor modification to program/graduate diploma academic requirements. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. Program/Graduate Diploma:

MBA (incl. MBA/MFA, MBA/MA), MBA/JD, IMBA, MAcc, MFIN, MREI, MGMT, MBAN

2. Effective Session of Proposed Change(s):

Summer 2017

3. Proposed Change(s) and Rationale

a) A description of the proposed modification(s) and rationale, including alignment with academic plans.

This proposal recalibrates some aspects of the admissions requirements. In particular, it proposes the following for all of the above Masters programs:

1. To add language that clarifies, in line with FGS provisions, that undergraduate degrees that conform with the European Bologna Declaration may be acceptable as equivalent to an honours degree, and to refer to “recognized post-secondary institutions” rather than “recognized university”;
2. To allow graduates from other 3-year degree programs to be admissible. Graduates from any 3-year degree will be subject to an additional year of work/life experience beyond the current minimum required by the program, to ensure a similar level of maturity. A 3-year degree is deemed acceptable since Schulich’s masters programs are not research focused and the competencies required for successful study are typically obtained by students in their first three years of study in any program. This provision does not apply to the MBAN. Albeit not part of the formal requirement, Schulich will begin implementing this provision by requiring a GPA that is one grade higher (e.g., A- instead of B+) than the minimum GPA requirement specified for the program and will evaluate the impact on student quality.
3. To exempt Schulich graduates with a B+ or better GPA during their last two years of studies from the GMAT/GRE requirement. To be eligible for this exemption, the applicant must have graduated from Schulich within the last five years. We know that our students are very capable, and asking them to take this additional hurdle serves no reasonable purpose.
4. To standardize the various formulations with regards to GMAT and GRE requirements. Currently, the programs use various formulations, including

“acceptable scores,” or “competitive scores” on the overall result or all dimensions of the tests. It is proposed to unify the language to “acceptable scores on all components of the GMAT or GRE.” In practice, the application of this requirement (currently a min. 550 for IMBA, MBA, MREI, min. 600 for the other programs, with averages much higher than that) will not change.

5. To change the proof of English language proficiency to requiring minimum scores on each language test component (IELTS: 6.5, TOEFL: 23) in addition to minimum average scores (IELTS: 7.0, TOEFL: 100). Students, in order to be effective, need to be able to speak, understand, read and write, rather than one or the other. As a result, not only the average language test scores are important, but also a minimum performance on all test components.

In addition, the following modifications to admissions requirements are sought for particular programs:

MBA (incl. MBA/MA, MBA/MFA). The MBA program proposes to accept the Graduate Records Exam (GRE) as a substitute to the Graduate Management Aptitude Test (GMAT). Experience with Schulich’s specialized Masters programs has shown that the GRE is as valuable a test as the GMAT. The scores can be easily compared to one another using available translation tools.

The program also proposes to award advanced standing for some of the courses students have taken in a Schulich specialized masters program. The MBA program already has the ability to grant either Waivers with Replacement or Advanced Standing for appropriate prior academic qualifications and a minimum of two years of full time work experience. It now seeks to add to the current provisions to specifically address graduates of Schulich’s specialized masters programs. In particular, it proposes the following additional provision:

- Advanced Standing may be granted to holders of the ACCA (Association of Chartered Certified Accountants) certification for eligible courses in the MBA1.

The MBA program already has a provision under which graduates that are Canadian Chartered Accountants (CPA, CA) and hold a business degree to obtain Advanced Standing for relevant course work. The above provision would extend the same courtesy to holders of the Association of Chartered Certified Accountants (ACCA) certification – one of the most widely recognized certification in the Commonwealth. Advanced Standing will be granted only for eligible courses.

MBA/JD. The program proposes to drop the GMAT requirement for applicants who have completed the LSAT at the 85th percentile or better. This is the admission requirement for Osgoode. While the LSAT does not include a quantitative section, it does cover reading comprehension, analytical reasoning, logical reasoning and an unscored writing sample that is sent to universities. As such, it is quite similar to the GMAT.

The program will also recommend to students without work experience to complete their first year of studies at Osgoode. Given that there is no work experience requirement for MBA/JD students, they are known to be very bright but also relatively inexperienced, as compared to other MBA students (average work experience ~ 6 years). Recommending to MBA/JD students who do not possess work experience to complete their first year of studies at Osgoode would close the gap somewhat by the time they would enter the first year of their MBA at Schulich. The University of Toronto has a similar mechanism for their MBA/JD program.

IMBA The International MBA program proposes to:

- Reinstate the minimum 2-year work experience requirement for the IMBA
- Exempt applicants whose IMBA language is English from the OPI requirement

Currently, the IMBA is a direct entry program. Traditionally, the program had a minimum 2-year work experience requirement, which is in line with that for the MBA program. The IMBA was significantly redesigned in 2013 and it was thought that it was sufficient to strongly recommend work experience, but not require it. Experience with the last three years of students shows that those without work experience have trouble keeping up with the program's pace and securing an adequate, graduate level placement (work term) in term 3. As a result, the program seeks to reinstate the 2-year work experience requirement.

Currently, all students are required to undergo language testing through the Oral Proficiency Interview (OPI). As most students who select English as their IMBA language already have to take a language test (TOEFL or IELTS) as part of their other regular admissions requirements, the OPI is not necessary for such students. Indeed, both TOEFL and IELTS test more than oral proficiency and are more reliable indicators of language proficiency. The OPI entry requirement of Intermediate High is approximately equivalent to the required TOEFL and IELTS scores (operational command of language with occasional inaccuracies and misunderstandings).

MFIN The Master of Finance program proposes to exempt holders of the CPA certification from the GMAT/GRE requirement. The Master of Finance currently exempts holders of the Certified Financial Analyst (CFA Level 1) from the GMAT/GRE requirement. The CPA certification is indicative of a very strong level of professional knowledge, exceeding the CFA Level 1 qualification.

MAcc The Master of Accounting proposes to waive for graduates from Schulich's undergraduate programs the requirement of a Statement of Interest and the submission of a CV.

The program also proposes to recognize prior qualifications applicants may have achieved through the Certified Professional Accountants (CPA) of Canada and Association of Chartered Certified Accountants (ACCA) qualification paths. In particular, as the program slightly repositions itself to also accommodate ACCA (rather than just CPA) applicants, the qualifications of one of the world's largest

Accounting Associations need to be explicitly considered. As all applicants to the program require an undergraduate degree and are subject to various other admission requirements, the quality of entering students remains assured. In particular, it proposes the following for holders of undergraduate degrees:

- That CPA students who have completed Core 1 within the CPA Professional Education Program (PEP) and ACCA students who have completed all Fundamentals level courses are eligible for admission to Term 1
- That CPA students who have completed Core 2 within the CPA PEP and ACCA graduates are eligible for admission to Term 2

In either case, students must complete the Schulich Accounting Standards for Private Enterprises (ASPE) and Case writing workshops before entering Term 2.

b) An outline of the changes to requirements and the associated learning outcomes/objectives, including how the proposed requirements will support the achievement of program/graduate diploma learning objectives.

Please see above. Learning outcomes or program requirements are not affected.

c) An overview of the consultation undertaken with relevant academic units and an assessment of the impact of the modifications on other programs/graduate diplomas.

Extensive consultations have taken place within Schulich with regards to the proposed changes. The consultations included all GPDs, the relevant program committees (who debated and approved them), the Schulich grad admissions and student services departments, the Schulich Dean, AD Academic and AD Students, as well as the FGS AD Academic and AD Students.

d) A summary of any resource implications and how they are being addressed.

Attention should be paid to whether the proposed changes will be supported by a reallocation of existing resources or if new/additional resources are required. If new/additional resources are required, the proposal must include a statement from the relevant Dean(s)/Principal.

There are no resource implications.

e) A summary of how students currently enrolled in the program/graduate diploma will be accommodated.

As these are not program changes per se, current students will not be affected by these changes.

Additional Rationales for the proposed Changes by Program

MBA Program (incl. MBA/MA, MBA/MFA)

Rationale

Experience with Schulich's specialized Masters programs has shown that the GRE is as valuable a test as the GMAT. The scores can be easily compared to one another using available translation tools.

The MBA program has a provision under which graduates that are Canadian Chartered Accountants (CPA, CA) and hold a business degree to obtain Advanced Standing for relevant course work. It is proposed that the same courtesy be extended to holders of the Association of Chartered Certified Accountants (ACCA) certification – one of the most widely recognized certification in the Commonwealth. Advanced Standing will be granted only for eligible courses.

All Schulich Masters Programs (except EMBA)

Rationale

1. The current admissions requirement of an honours degree systematically excludes graduates from European 3-year programs that many other programs and Universities recognize to be equivalent to a North American 4-year degree. It also excludes non-science and non-engineering programs from many Commonwealth countries. This is signified by the fact that most of the MBA program's Indian students are engineers. Bringing the admissions standard for European degrees in line with FGS standards and opening up admissions to other 3-year degrees as well will make it easier for the School to diversify its student population beyond the current usual suspects.
2. Albeit not part of the formal requirement, Schulich will begin implementing this provision by requiring a GPA that is one grade higher (e.g., A- instead of B+) than the minimum GPA requirement specified for the program and will evaluate the impact on student quality.
3. As for the GMAT/GRE exemption for Schulich graduates, we know that our students are very capable, and asking them to take this additional hurdle serves no reasonable purpose.
4. Currently, the programs use various formulations, including "acceptable scores," or "competitive scores" on the overall result or all dimensions of the tests. It is proposed to unify the language to "acceptable scores on all measures of the GMAT or GRE." In practice, the application of this requirement (currently a min. 550 for IMBA, MBA, MREI, min. 600 for the other programs, with averages much higher than that) will not change.
5. This motion formalized a practice that has been instituted over the past few years. Students, in order to be effective, need to be able to speak, understand, read and write, rather than one or the other. As a result, not only the average language test scores are important, but also a minimum performance on all test components.

MBA / JD Program

Rationale

The 85th percentile is the admission requirement for the Osgoode JD program. While the LSAT does not include a quantitative section, it does cover reading comprehension, analytical reasoning, logical reasoning and an unscored writing sample that is sent to universities. As such, it is quite similar to the GMAT. MBA/JD applicants also have a higher minimum GPA requirement than regular MBA applicants (A- versus B). Thus, we know that they are academically strong.

Given that there is no work experience requirement for MBA/JD students, they are known to be very bright but also relatively inexperienced, as compared to other MBA students (average work experience ~ 6 years). Recommending to MBA/JD students who do not possess work experience to complete their first year of studies at Osgoode would close the gap somewhat by the time they would enter the first year of their MBA at Schulich. The University of Toronto has a similar mechanism for their MBA/JD program.

IMBA Program

Rationale

Currently, the IMBA is a direct entry program. Traditionally, the program had a minimum 2-year work experience requirement, which is in line with that for the MBA program. The IMBA was significantly redesigned in 2013 and it was thought that it was sufficient to strongly recommend work experience, but not require it. Experience with the last three years of students shows that those without work experience have trouble keeping up with the program's pace and securing an adequate, graduate level placement (work term) in term 3. As a result, the program seeks to reinstate the 2-year work experience requirement.

Currently, all students are required to undergo language testing through the Oral Proficiency Interview (OPI). As most students who select English as their IMBA language already have to take a language test (TOEFL or IELTS) as part of their other regular admissions requirements, the OPI is not necessary for such students. Indeed, both TOEFL and IELTS test more than oral proficiency and are more reliable indicators of language proficiency. The OPI entry requirement of Intermediate High is approximately equivalent to the required TOEFL and IELTS scores (operational command of language with occasional inaccuracies and misunderstandings).

MAcc Program

Rationale

By the time our undergraduate students have taken the numerous Accounting electives in years 3 and 4 of their programs, we know what their interests are. The Statement of Interest and CV serve no reasonable purpose.

The program also proposes to recognize prior qualifications applicants may have achieved through the Certified Professional Accountants (CPA) Canada and Association of Chartered Certified Accountants (ACCA) qualification paths. As the program slightly repositions itself to also accommodate ACCA applicants, the qualifications of one of the world's largest Accounting Associations need to be explicitly considered. As all applicants to the program require an undergraduate degree and are subject to various other admission requirements, the quality of entering students remains assured. However, as Schulich's Accounting program educates students in more than accounting, there is the additional requirement of a case writing workshop and Canadian Accounting Standards for Private Enterprises (ASPE) workshops before entering Term 2.

MFIN Program

Rationale

The Master of Finance currently exempts holders of the Certified Financial Analyst (CFA Level 1) from the GMAT/GRE requirement. The CPA certification

For Information

Schulich also requires applicants to its programs to also submit supplementary application. This application has traditionally consisted of the following items:

- A statement of interest, in which the candidate articulates how the program will help them to meet their objectives.
- A program-specific essay.
- An optional essay, which provides the candidate with the opportunity to articulate any other information or areas of concern potentially relevant to the admissions committee.

In order to further strengthen the admissions process, and in consultation with program stakeholders, the following additional items have been or are in the process of being implemented:

- Two timed video essays. (Implemented.) Applicants are asked a question randomly selected from a question bank. Applicants are given 45 seconds to prepare a response and then 90 seconds to record their answer. The questions have been designed or vetted by Schulich and tend to focus on getting to know the candidate as a person. The purpose of this component is to get a sense of the applicant prior to a more personalized interview. It allows admissions officers to assess how articulate the applicant as well as their level of verbal skills if their first language is not English. For the admissions team, these video essays also provide a means of "refreshing" ones memory about an applicant when reviewing and assessing his/her file.
- A timed written essay. (Being implemented.) Applicants are given a question from a question bank, which the software randomly selects. The applicant is given 5 minutes to craft a response in real time. The questions revolve around the applicant's opinion on a particular topic with the purpose of evaluating the applicant's response in terms of structure, coherence and command of the

English language (grammar, spelling etc.). This component of the application will launch with Salesforce (the new application CRM).

In addition to the above, all competitive applicants are interviewed either in person or via Skype.

These supplementary application components, when paired with other metrics in the application, such as a candidate's verbal score on the GMAT and language scores (on the TOEFL or IELTS) provide the admissions team with some valuable insights into the candidate's objectives, motivations and communication skills.

EXISTING CALENDAR COPY

RULES GOVERNING UNDERGRADUATE DEGREE REQUIREMENTS**General Regulations****BACHELOR OF ARTS (BA)**

In order to graduate with a bachelor of arts:

1. All students are required to observe the regulations of the University. Unless otherwise stated, any changes in regulations become effective as announced. This policy is not meant to disadvantage students as they proceed through their studies, including those who have completed a number of courses. It is intended to ensure that their preparation for courses is appropriate and current. Students should consult closely with departments and the Faculty through the advising process.
2. It is the student's responsibility to enrol in only those courses for which the student has successfully completed all designated prerequisites and to take concurrently all specified corequisites not already completed successfully. See also prerequisites/corequisites under Advising in the Faculty of Science Advising, Enrolment, Registration, Graduation and Other Administrative Procedures section.
3. Satisfy the general education requirement:
 - a total of 24 credits from the following areas: humanities, modes of reasoning, natural science, social science. Of these 24 credits, students must complete the following:
 - minimum requirements: at least six credits from humanities, natural science and social science (with no more than nine credits in each counting towards this requirement).

Note: students may complete a maximum of three nine-credit foundations courses for degree credit. Students who need to complete more than three foundations courses in order to fulfill program (major or minor) course requirements may do so with permission of the relevant program coordinator or undergraduate director.

REVISED CALENDAR COPY

RULES GOVERNING UNDERGRADUATE DEGREE REQUIREMENTS**General Regulations****BACHELOR OF ARTS (BA)**

In order to graduate with a bachelor of arts:

1. All students are required to observe the regulations of the University. Unless otherwise stated, any changes in regulations become effective as announced. This policy is not meant to disadvantage students as they proceed through their studies, including those who have completed a number of courses. It is intended to ensure that their preparation for courses is appropriate and current. Students should consult closely with departments and the Faculty through the advising process.
2. It is the student's responsibility to enrol in only those courses for which the student has successfully completed all designated prerequisites and to take concurrently all specified corequisites not already completed successfully. See also prerequisites/corequisites under Advising in the Faculty of Science Advising, Enrolment, Registration, Graduation and Other Administrative Procedures section.
3. Satisfy the general education requirement, **24 credits in total, as follows:**
 - ~~a total of 24 credits from the following areas: humanities, modes of reasoning, natural science, social science. Of these 24 credits, students must complete the following:~~
 - ~~minimum requirements: at least six credits from humanities, natural science and social science (with no more than nine credits in each counting towards this requirement).~~
 - **a minimum of six credits from natural science (NATS) (with no more than nine credits counting towards this requirement)**
 - **a minimum of six credits from the humanities category from the Faculty of Science Bachelor of Arts approved list of general education courses (with no more than nine credits counting towards this requirement).**
 - **a minimum of six credits from the social science category from the Faculty of Science Bachelor of Arts approved list of general education courses (with no more than nine credits counting towards this requirement).**

Note: ~~students may complete a maximum of three nine-credit foundations courses for degree credit. Students who need to complete more than three foundations courses in order to fulfill program (major or minor) course requirements may do so with permission of the relevant program coordinator or undergraduate director.~~ **The approved list Faculty of Science Bachelor of Arts general education courses is posted on the York Course Website.**

Major Modification Proposal

1. Program:

Dance

2. Degree Designation:

Master of Fine Arts

3. Type of Modification:

Major modification of an existing program: deletion of a field of study, modifications to the remaining field of study, and changes to program requirements.

4. Effective Date:

September 2017

5. Provide a general description of the proposed changes to the program.

Currently, the Master of Fine Arts in Dance provides students opportunities for research within two fields: **contemporary choreography** and **dance dramaturgy**. We propose to:

- i. Remove the field of **dance dramaturgy**, and modify the field of contemporary **choreography** to include an additional focus on **Collaboration and Creation**.
- ii. In addition, we are changing the program requirements in regards to required courses and the thesis; specifically:

Required Courses, the removal of:

- Dance 5350 3.0: Theory and Practice in Dance Dramaturgy)
- Dance 5502 3.0: Initiating, Forming and Performing Choreography II)
- Dance 6004 0.0: Contemporary Choreography, Professional Qualifying Practica II (Winter) (Non-credit)

Replaced with, instead of having the option of taking one of the following courses, students must take all three of the following courses:

- Dance 5221 3.0: The Interactive Stage Explorations in Electronically Mediated Performances
- Dance 5260 3.0: Dance Video and Intermedial Performance
- Dance 5270 3.0: Lighting Design for Dance I

Total Required Credits remains at 18

Changes to Thesis:

- **Thesis Proposal and Research: Simplification of the Thesis Process and clarification of submission timeline.** Though not articulated in the Calendar, our current program offered students two fully produced shows, one in a 'studio' situation, and the other in the large proscenium theatre. In the revised program, during the first two terms, and concurrent with their course-work, students prepare a thesis proposal to be submitted for approval by the end of their second term. Supporting research and their collaborative/creative work, a public presentation, will be completed no later than the mid-point of program
- **Thesis and Oral Examination: A clarification of the timeline for the Oral Examination.** "The student's research and creative process will be self-examined and contextualized through an extended research essay (thesis). An oral examination held at the end of the fifth-term, focused equally on the thesis and the related collaborative project, will complete the requirements for the degree."

6. Provide the rationale for the proposed changes.

The Dance Dramaturgy stream has never received the interest we hoped it would. Of the 28 students who graduated with a MFA in Dance degree over the past 6 years, only 2 completed in the field of Dance Dramaturgy.

In the field of contemporary choreography, our students have continued to demonstrate an ever-increasing interest in, and demand for, the integration of digital technology in live performance, which often demands the ability to collaborate with specialists from a wide-range of disciplines. The proposed MFA in Dance Program: 'Choreography | Collaboration | Creation', better reflects the way many contemporary artists are working. This student-centered, experiential, intensive five-term program requires program participants to form collaborative teams with other graduate students from a wide-range of disciplines and diverse skill-sets, successfully creating, producing and presenting their own work.

While there are over 20 MFA in Dance programs listed in the United States, we are currently the only MFA in Dance offered in Canada. The field remains small, highly specialized and critical to the development of dance in Canada. As stated above, over the 6 years the program has been active, we have graduated 28 students. We expect the current demand will continue and are planning for an annual intake of a minimum of 4 students.

7. Comment on the alignment between the program changes with Faculty and/or University academic plans.

Experiential: This proposal aligns with York University's Strategic Mandate Agreement (SMA), the proposal offers students "Experiential Education opportunities" both in-class and in community (2.0 Teaching and Learning). Students have access to the finest and best-equipped performance facilities in the country. The 'critical skills' courses offered

within department include hands-on training with theatrical lighting equipment, video capture/editing suites and 3D motion tracking equipment. In addition, as the student work is self-produced, they have the opportunity to present their research projects in the GTA, offering intensive experiential learning.

Collaborative | Creation: In the liberal arts, the SMA states York University sees its strengths in offering “interdisciplinary programs that ensure graduates have the flexible and transferable skills sought by employers . . . including . . . the ability to work together in inter-professional teams (1.0 Jobs, Innovation, and Economic Development).

On the Faculty website AMPD’s Dean, Shawn Brixey, clarifies our mandate: “In our creative future, imagination on its own is simply not enough. We need artists who are thinkers, makers, **collaborators** and **innovators**. These are the kinds of leaders we’re preparing at AMPD.” Offering our MFA in Dance students the opportunity to work collaboratively, creating live-performance art that makes use leading-edge technologies will ensure our students meet that vision.

As found in the York University Strategic Research Plan (SRP), “The University community is drawn together by the breadth and scope of scholarship in communications and cultural studies, **fine arts, digital arts** and arts-based education, philosophy and environmental studies, languages, literature and linguistics, technical and creative writing, and translation. Through this research, leading arts and humanities scholars, librarians and practitioners cut across traditional disciplinary boundaries to facilitate **dynamic collaborations**.” The proposed MFA in Dance program moves towards a collaborative model in which, “critical and creative features are mutually informative and often interwoven, whether in the publications of scholars in our research programs, the **practice-based production of artists, designers and performers in York’s studio programs** or in areas that traverse the two. (York University Strategic Research Plan 2013-2018, p11

8. Provide a detailed outline of the changes to the program and the associated learning outcomes, including how the proposed requirements will support the achievement of program learning objectives (i.e., the mapping of the requirements to the program learning outcomes).

Only small changes to the learning objectives were necessary as we move towards the revised program. We removed references to the Dance Dramaturgy Field and incorporated the shift towards collaboration and the incorporation of evolving/innovative technologies. This shift is reflected in the curriculum-mapping document (see Appendix A), and for clarity, a detailed curriculum mapping follows:

	Degree-Level Expectation	Program Learning Objectives (with assessment embedded in outcomes)	Appropriate Degree Requirement & Assessment
	This degree is awarded to students who have demonstrated the following:	By the end of this program, students will be able to	
1. Depth and breadth of knowledge	A <u>systematic understanding of knowledge</u> , including, where appropriate, relevant <u>knowledge outside the field</u> and/or discipline, and a <u>critical awareness of current problems</u> and/or new insights, much of which is at, or <u>informed by, the forefront</u> of their academic discipline, field of study, or area of professional practice.	a) discriminate a clear dance idea as it emerges from dance creation research and/or studio research-practices, in order to develop an aesthetic point of view. b) articulate through written (course/thesis written work) and practice (studio/thesis presentation), a critical awareness of fundamental elements of human movement. c) develop a critical awareness of current and leading-edge practices of dance as they reflect evolving socio-cultural, technological, and artistic sensibilities from within (or from outside) of the fields of contemporary choreography.	5221 – Mid-term exam: current technology and developed principles of real-time interactive presentation, including intermedial work. – Major Research Paper: examining the work of contemporary practitioners of interactive explorations. 5260 – Mid-term exam: history, technology, and principles of design for dance video. – Major Research Paper: contextualizing significant moving-image artist or inter-medial body of work. 5270 – Mid-term exam: technical knowledge of modern lighting equipment and principles of design for live performance. – Major Research Paper: analyzing significant lighting designer and/or body of work. 5300 – In Studio: movement studies, observation-based critical discussions, peer-assessment, and presentations. – Literature Review. 5501 – Series of written/oral analyses: Critical Commentaries, Studio Process reflections, and Critical Responses to seminal texts.

2. Research & scholarship	A conceptual understanding and methodological competence that a) Enables a working comprehension of how <u>established techniques of research and inquiry</u> are used to create and interpret knowledge in the discipline; b) Enables a <u>critical evaluation of current research and advanced research and scholarship</u> in the discipline or area of professional competence; and c) Enables a <u>treatment of complex issues and judgments</u> based on established principles and techniques; and on the basis of that competence, has shown at least one of the following: i) The development and support of a <u>sustained argument</u> in written form; or ii) <u>Originality</u> in the application of knowledge.	a) devise a clear line of creative and/or scholarly research building on currently established forms of practice-led research and/or research-led practice as informed by theoretical and experiential understandings of the body. b) devise and argue a critical (possibly original) dance discourse contextualized within the historical, cultural and theoretical issues of current research in the field. c) devise and defend a critical (possibly original) dance discourse contextualized within the methodologies of creative dance practices.	5221 – Major Research Paper: examining the work of contemporary practitioners of interactive or remediated explorations. 5260 – Major Research Paper: contextualizing significant moving-image artist or inter-medial body of work. 5270 – Major Research Paper: analyzing significant lighting designer and/or body of work. 5300 - Movement Analysis preliminary and final project presentations (oral and/or written): create and perform solo and present analysis, and/or select excerpt from existing choreography (on DVD) to present an analysis based on Laban's theory of Body Space, Shape and Effort. 5501 – Series of written/oral analyses: Critical Commentaries, Studio Process reflections, and Critical Responses to seminal texts. – “In the Style Of... :” researching and embodying a choreographic master. – Series of Choreographic Initiatives: referencing musical visual, historical, literary sources and culminating in producing public performances.
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3. Level of application of knowledge	a) Competence in the <u>research process</u> by applying an existing body of knowledge in the <u>critical analysis of a new question</u> or . . . b) of a specific problem or issue in a new setting or form.	a) collaborate creatively and effectively within the studio as a choreographer interacting with dancers, designers, composers, administrators and audiences to build original meaningful theatrical dance events, which have the potential to move the field forward and/or act as a catalyst for social inquiry and incorporating principles consistent with current sustainable dance theatre practices. b) utilize artistic and conceptual skills through innovative and intermedial processes, to research and implement original dance works incorporating evolving technologies available to dance artists: e.g., film/video, digital media, and the interactive stage.	5221 – Term Interactive Stage Project: present effective, and intelligible real-time interactivity in support of choreographic intent. 5260 – Term Video Project: demonstrate creative cinematic and editing techniques for dance video, develop choreography for the camera. 5270 – Term Lighting Design Project: create lighting design for a public dance performance. 5300 - Movement Analysis preliminary and final project presentations (oral and/or written): create and perform solo and present analysis, and/or select excerpt from existing choreography (on DVD) to present an analysis based on Laban's theory of Body Space, Shape and Effort. 5501 – Series of Choreographic Initiatives: referencing musical visual, historical, literary sources and culminating in producing public performances. – Series of written/oral analyses: Critical Commentaries, Studio Process reflections, and Critical Responses to seminal texts.
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4. Professional capacity/ autonomy	a) The qualities and transferable skills necessary for employment requiring: i) The <u>exercise of initiative</u> and of personal <u>responsibility</u> and accountability; and ii) <u>Decision-making</u> in complex situations; b) The <u>intellectual independence</u> required for continuing professional development; c) The <u>ethical behavior</u> consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and d) The ability to <u>appreciate the broader implications</u> of applying knowledge to particular contexts.	a) develop processes for creating collaborative in-class presentations and/or a collaborative choreographic event throughout the complex decision-making processes of creation, rehearsal, production and audience outreach. b) develop original dance ideas in various contexts (community programs, dance-on-film, artists-in-schools, opera, musicals, etc.), working independently or in collaboration with other artists, artistic directors and/or administrators. c) lead a choreographic process in a professional manner (either as a contemporary choreographer, or a dance dramaturg) and demonstrate ethical responsibility inherent in working directly and intuitively with bodies, especially in the studio. d) engage through post-show discussions and feedback, dance scholars, artists, and/or audiences in critical discourse concerning the theoretical understanding of movement principles and/or the genesis, development and performance of the danced event.	5221 – Term Interactive Stage Project: effective, and intelligible real-time interactivity used in support of choreographic intent. 5260 – Term Video Project: demonstrate creative cinematic and editing techniques for dance video, develop choreography for the camera. 5270 - Term Lighting Design Project – work as member of collaborative team to design lighting for a dance performance. 5300 – In Studio: movement studies, observation-based critical discussions, peer-assessment, and presentations. 5501 - Series of Choreographic Initiatives referencing musical, visual, historical, literary sources and culminating in producing public performances. – creating tools for developing embodying, and articulating elements of choreographic craft for practitioners from diverse cultural, social, generational, and dance-art backgrounds. Thesis Project - Choreographic works: studio piece (body as site), proscenium stage, self-produced choreography in various sites. Thesis - Extended Essay: outlining process and outcomes, and including archival documentation of work created.
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5. Level of communication skills	The ability to communicate ideas, issues and conclusions clearly.	disseminate a choreographic idea through clear development of "physical text". select appropriate scholarly language and structures to organize and present critical analyses in written and oral forms for communicating with various audiences.	Written communication: 5221 – Major Research Paper: examining the work of contemporary practitioners of interactive explorations. 5260 – Major Research Paper contextualizing significant moving-image artist or inter-medial body of work. 5270 – Major Research Paper: significant lighting designer and/or body of work. Cinematic communication: 5260 - Term Video Project: cinematic and editing techniques for dance video. Communication of design concepts: 5270 Term Lighting Design Project Communication through advanced technology: 5221 Term Interactive Project Performative communication: 5300: Studio work, and Movement Analysis for preliminary and final project presentations. 5501 - Series of Choreographic Initiatives referencing musical visual, historical, literary sources and culminating in producing public performances. – "In the Style Of... :" researching and embodying a choreographic master. Written and/or Oral communication: 5300: Movement Analysis (preliminary and final project presentations). 5501 – "Maintaining a Personal Voice in Prescribed Structures" - major paper.
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5. Continued			Thesis Project - Choreographic works: studio piece (body as site), proscenium stage, self-produced choreography in various sites. Thesis - Extended Essay: outlining choreographic or dramaturgical process and outcomes, and including archival documentation of work created.
6. Awareness of limits of knowledge	Cognizance of the complexity of knowledge and of the potential contributions of other interpretations, methods, and disciplines.	articulate the many complexities of presenting dance as an interpretive art form to audiences from diverse socio-cultural, generational, and dance-art backgrounds. appraise the aesthetic/social nuances produced by their particular contributions to the field within the current national, international contexts of contemporary choreography. analyze one's personal movement predispositions affecting movement observation and/or movement creation and development.	5260 – Dance video analysis (in-class discussions). 5270 – Lighting design analysis (in-class discussions). 5300 - Studio work, and Movement Analysis for preliminary and final project presentations. 5350 - Theory Seminar, Design Project. 5501 – Series of written/oral analyses: Critical Commentaries, Studio Process reflections, and Critical Responses to seminal texts. 5501 – “Creative Process” paper. Thesis - Extended Essay: outlining choreographic process and outcomes, and including archival documentation of work created.

9. Summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

In addition to a full year of Department of Dance meetings with Full-Time Faculty and the Department Executive, over the last 2 months I have consulted with the Departments of Theatre, Music and Computational Arts in face-to-face meetings. The following are a few comments sent in response to an email inquiry for feedback from our three most collaborative departments:

Dr. Mark Chambers, GPD of Music states: "On behalf of the Graduate Program in Music I'd like to fully add our support to the MFA in Dance: Choreography/Collaboration/Creation program. The changes outlined in the revisions of the MFA program will undoubtedly create an excellent collaborative opportunity for our students."

MFA in Theatre GPD, Professor Erika Batdorf, responded: "The Graduate Program in Theatre supports the MFA in Dance proposal, and would support graduate students wanting to work in this collaborative creation model." She goes on to list courses offered by the Theatre Graduate Program that would be open to our students (with permission).

Professor Don Sinclair, Chair of Computational Arts: "from the perspective of the Department of Computational Arts and the proposed Graduate Program in Digital Media, the MFA in Dance Program: Choreography | Collaboration | Creation has great potential to provide Digital Media graduate students with exciting interdisciplinary collaborative team projects that they could pursue through either courses or their major research project." (Please note: Computational Arts application for a Graduate program is in process. At the present time, it has not been approved)

Impact on other programs: Although we are all feeling the pressure of limited resources, it is hard to see any downside to this proposal in regards to impact on other programs. We are still focused on students of choreography, a highly specialized field, and therefore not in competition for prospective students. Opening our courses to each other will enhance inter-disciplinarity, sharing of teaching resources and help programs to populate graduate courses. We are committed to remaining as flexible as possible in regards to the collaborations and thesis projects. All projects will be approved by the supervisor based on available resources: venue, equipment and faculty support.

It should be noted, our shift towards Choreography | Collaboration | Creation is unique in Canada. Perhaps the closest is Simon Fraser University in Vancouver: *The Master of Fine Arts in Interdisciplinary Studies (MFA) program provides advanced professional training for artists in the fields of music, **dance**, theatre, film, video and visual art.* While similar in structure, and intent, it is not an MFA in

Dance, but rather, an MFA in Interdisciplinary Studies.

10. Are changes to the program's admission requirements being proposed coincident with the program change(s)? If so, outline the admission changes, and comment on the appropriateness of the revised requirements to the achievement of the program learning outcomes.

The only to changes to requirements (as written below), removed the reference to the Dance Dramaturgy program and added the full name of the proposed Choreography program.

Normally candidates for the MFA in Dance: Choreography | Collaboration | Creation program will have a BFA in dance, or equivalent, with a B+ average or above in the last two years of study. Candidates are expected to enter with a full understanding of choreographic elements and knowledge of dance history and dance aesthetics. When applying, all candidates are required to submit video examples of their most recent choreography and a statement outlining their objectives in pursuing this degree. The entrance MFA Graduate committee conducts interviews in person or by telephone as required.

11. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

We currently have 3 full-time MFA Faculty who are capable of delivering the required courses (Susan Cash, Darcey Callison, William Mackwood). In addition, the department has approval for, and is actively engaged in, a search for a tenure-track position in Screendance, as described in the posting: "*The successful candidate will have extensive artistic and demonstrable expertise in the areas of Screendance, choreography, technique, performance, and contemporary media technologies, both aesthetic and creative, as a component of an interactive, hybridized arts practice.*" The successful completion of this search will ensure we have the faculty compliment necessary to fully support the program into the foreseeable future.

Our current program offered students two fully produced shows, one in a 'studio' situation, and the other in the large proscenium theatre. Lately, and in light of the SHARP budget, we have become concerned with the sustainability of that model (i.e. offering large and very expensive production facilities). Therefore, we will no longer be responsible for fully producing student work. Students will be expected to form collaborative teams and create/produce their own projects. Specialized department equipment and expertise will be made available to them. Note: if the department's performing season allows, their work could be incorporated into other curricular shows, but this would depend on many factors, and be decided through consultation with the student, their supervisor, and the department chair.

Having said that, it should be noted that we have access to some of the finest performance facilities in the country. The Sandra Faire and Ivan Fecan Theatre and the McLean Performance Studio are both state-of-the-art theatres. Our Studio 'A' is currently being developed as an incubator lab to support interactive performance research and development. In addition, the department has a rolling lab stocked with laptop computers offering the latest software to support student/faculty research, and a good selection of video and 3D cameras with supporting hardware. The program offers students a truly collaborative, experiential journey, one in which they will thrive on their ability to gather resources and make things happen, as most professional artists do.

Though not directly related to academic resources, an ongoing concern raised by the Cyclical Program Review and the AMPD Dean's office has been the ability of the department to offer our MFA students consistent and meaningful Teaching Assistant opportunities. The successful introduction of the FA/DANC 1400, "Dancing for Non-Majors" promises to offer meaningful assistant teaching positions during each term.

12. Is the mode of delivery of the program changing? If so, comment on the appropriateness of the revised mode(s) of delivery to the achievement of the program learning outcomes.

The balance between studio and lecture courses, with their associated blended e-learning has not changed significantly. The shift in the student's thesis project, from a department produced show, to a focus on collaborative creation offers a more student-centered, experiential model for learning, but does not change the mode of delivery.

13. Is the assessment of teaching and learning within the program changing? If so, comment on the appropriateness of the revised forms of assessment to the achievement of the program learning outcomes.

The assessment of teaching and learning remains much the same (assessment within courses is detailed in Section 8 above). As stated, the program thesis moves away from a narrowly prescribed research creation process, towards a more student-centered, research specific process and presentation. Students will assemble their own collaborative teams and present publicly using their team-chosen medium or intermedial process.

Students will be guided through the creation process by faculty (graduate supervisors), and ultimately, the collaborative team's work must be presented to the public. The student's research and creative process will then be self-examined and contextualized through an extended research essay (thesis). Finally, an oral examination focused equally on the thesis and related collaborative project, will complete their research/creation journey. This model of assessment has been successful for the previous 5 years, and though the scope and scale of the thesis project has changed, the method of assessment has not.

14. Provide a summary of how students currently enrolled in the program will be accommodated.

There are currently no students enrolled in the program. Students enrolling from September 2017 on will be subject to the format and focus proposed here.

APPENDIX A:

MFA in Dance Curriculum Mapping

The program learning outcomes the courses contribute to, and at what level, are identified by using the following rubric: **I** if the outcome is simply introduced in the course; **D** if the outcome is developed in the course, but not achieved; or **A** if the outcome is applied in the course and achieved.

(Note: none of the courses have prerequisites and most are done simultaneously)

Program Learning Outcomes	Courses / Program Requirements							
	5221 Interactive Stage	5260 Dance Video	5270 Lighting Design	5300 Movement Observation	5501 Choreo- graphy	5602 Dance Production	6003 Professional Practica	Thesis
1. Depth and breadth of knowledge								
a) <u>discriminate</u> a clear dance idea as it emerges from dance creation research and/or studio research-practices, in order to develop an aesthetic point of view.	D	D		D	A		A	A
b) articulate through written (course/thesis written work) and practice (studio/thesis presentation), a critical awareness of fundamental elements of human movement.	D	D	I	A	A		A	A
c) develop a critical awareness of current and leading-edge practices of dance as they reflect evolving socio-cultural, technological, and artistic sensibilities from within (or from outside) of the fields of contemporary choreography.	D	D	D	D	D		D	A

	5221 Interactive Stage	5260 Dance Video	5270 Lighting Design	5300 Movement Observation	5501 Choreo- graphy	5602 Dance Production	6003 Professional Practica	Thesis
2. Research & scholarship								
a) devise a clear line of creative and/or scholarly research building on currently established forms of practice-led research and/or research-led practice as informed by theoretical and experiential understandings of the body.	D	D	I	D	D		D	A
b) devise and argue a critical (possibly original) dance discourse contextualized within the historical, cultural and theoretical issues of current research in the field.	D	D	D	D	D		D	A
c) devise and defend a critical (possibly original) dance discourse contextualized within the methodologies of creative dance practices.	D	D	I	D	D		D	A
3. Level of application of knowledge								
a) collaborate creatively and effectively within the studio as a choreographer interacting with dancers, designers, composers, administrators and audiences to build original meaningful theatrical dance events, which have the potential to move the field forward and/or act as a catalyst for social inquiry and incorporating principles consistent with current sustainable dance theatre practices.	A	A	A	D	D	D	D	A
b) utilize artistic and conceptual skills through innovative and intermedial processes, to research and implement original dance works incorporating evolving technologies available to dance artists: e.g., film/video, digital media, and the interactive stage (3D technology).	A	A	A	D	D	D	D	A

	5221 Interactive Stage	5260 Dance Video	5270 Lighting Design	5300 Movement Observation	5501 Choreo- graphy	5602 Dance Production	6003 Professional Practica	Thesis
4. Professional capacity/ autonomy								
a) develop processes for creating collaborative in-class presentations and/or a collaborative choreographic event throughout the complex decision-making processes of creation, rehearsal, production and audience outreach.	A	A	A	D	D	D	D	A
b) develop original dance ideas in various contexts (community programs, dance-on-film, artists-in-schools, opera, musicals, etc.), working independently or in collaboration with other artists, artistic directors and/or administrators.	A	A	I	D	D	I	D	A
c) lead a choreographic process in a professional manner as a contemporary choreographer and demonstrate ethical responsibility inherent in working directly and intuitively with bodies, especially in the studio.					A			A
d) engage through post-show discussions and feedback, dance scholars, artists, and/or audiences in critical discourse concerning the theoretical understanding of movement principles and/or the genesis, development and performance of the danced event.	D	D	D	D	A		D	A

	5221 Interactive Stage	5260 Dance Video	5270 Lighting Design	5300 Movement Observation	5501 Choreo- graphy	5602 Dance Production	6003 Professional Practica	Thesis
5. Level of communication skills								
a) disseminate a choreographic idea through clear development of “physical text”.	D	D		D	D		D	A
b) select appropriate scholarly language and structures to organize and present critical analyses in written and oral forms for communicating with various audiences.	D	D	D	D	D		D	A
6. Awareness of Limits of Knowledge								
a) articulate the many complexities of presenting dance as an interpretive art form to audiences from diverse socio-cultural, generational, and dance-art backgrounds.	I	I		D	D		D	A
b) appraise the aesthetic/social nuances produced by their particular contributions to the field within the current national, international contexts of contemporary choreography.	I	I		D	D		D	A
c) analyze one’s personal movement predispositions affecting movement observation and/or movement creation and development.	I	D		D	D		D	A

Minor CHANGE TO EXISTING DEGREE/CERTIFICATE

Prior to completing this form, proponents are asked to consult Vivian Olender, Faculty Curriculum Manager, volender@yorku.ca for definitions of major versus minor modifications.

Completed Submission Deadline: 4T

Department/School:	Anthropology	Contact:	Albert Schrauwers
Degree/Certificate Title:	Honours Major, iBA Major, Specialized Honours Major		
Stream (if applicable):			
Effective Session for Change:	Term: (e.g., Fall; Winter; Summer)	Fall	Year: 2017

Minor Change Description: (e.g. what is the change requested, what does this change mean for the degree, certificate, etc.):

In our current degree structure, students begin the Anthropology program at the second year, and must take all 42 credits in their second to fourth years. We propose to offer students the opportunity to begin the program in the first year without changing the overall number of credits. In the revised program, students would now be required to take 18 credits in their first two years, and 24 credits in their last two years. We are also taking the opportunity to update the list of our second year electives, as we phase out two courses (ANTH 2120 and 2200) and introduce their replacements (ANTH 2130 and 2330).

Academic Rationale for Change:

In the current degree structure, students do not commence the program until second year, and hence must take all 42 credits in their second to fourth years (54 credits in the case of our Specialized Honours degree). This is frustrating for direct entry majors who cannot immediately begin their program, some of whom opt for other programs as a result. The heavy weighting of credits in the final years also makes it very difficult for students to plan a double unlinked major (84 of 90 available credits in the second through fourth years). We are thus proposing to open the possibility for some students to utilize our former degree structure from before 2014 by allowing direct entry at the first year.

Please note: the Committee on Curriculum, Curricular Policy and Standards requires that degree or certificate requirements, as listed in the Undergraduate Calendar ([click here](#)), be included below in their entirety.

Existing Calendar Copy (Change From):	Proposed Calendar Copy (Change To):
Example: Delete this text. Honours BA Program (Students have to complete 42 credits in Anthropology and a total of 120 credits.) • AP/ANTH 2110 6.00 Core Concepts in Anthropology; • 6 additional credits at the 2000 level in anthropology from among AP/ANTH 2100, 2120, 2170 or 2200 • AP/ANTH 3110 6.00 Acquiring Research Skills; • AP/ANTH 4110 6.00 Development of Theory in Social Anthropology; • 18 additional credits at the 3000 or 4000 level in anthropology of which at least 6.00 are at the 4000 level. Specialized Honours BA Program (Students have to complete 54 credits in Anthropology and a total of 120 credits.) • AP/ANTH 2110 6.00 Core Concepts in Anthropology; • 12 additional credits at the 1000 or 2000 level in anthropology from among AP/ANTH 1120, 2100, 2120, 2170 or 2200; • AP/ANTH 3110 6.00 Acquiring Research Skills; 12 additional credits at the 3000 level in anthropology; • AP/ANTH 4110 6.00 Development of Theory in Social Anthropology; • 12 additional credits at the 4000 level in anthropology.	Example: <u>Add</u> this text. Honours BA Program (Students have to complete 42 credits in Anthropology and a total of 120 credits.) • AP/ANTH 2110 6.00 Core Concepts in Anthropology; • <u>12</u> additional credits at the <u>1000 or</u> 2000 level in anthropology from among AP/ANTH <u>1120</u>, 2100, 2120, <u>2130</u>, 2170, 2200 or <u>2330</u>. • AP/ANTH 3110 6.00 Acquiring Research Skills; • <u>6 additional credits at the 3000 level in anthropology</u> • AP/ANTH 4110 6.00 Development of Theory in Social Anthropology; • <u>6</u> additional credits at the 4000 level in anthropology. Specialized Honours BA Program (Students have to complete 54 credits in Anthropology and a total of 120 credits.) • AP/ANTH 2110 6.00 Core Concepts in Anthropology; • 12 additional credits at the 1000 or 2000 level in anthropology from among AP/ANTH 1120, 2100, 2120, <u>2130</u>, 2170, 2200 or <u>2330</u>. • AP/ANTH 3110 6.00 Acquiring Research Skills; 12 additional credits at the 3000 level in anthropology; • AP/ANTH 4110 6.00 Development of Theory in Social Anthropology; • 12 additional credits at the 4000 level in anthropology.

**Honours International BA Program (iBA)
(Students have to complete 42 credits in
Anthropology and a total of 120 credits.)**

- AP/ANTH 2110 6.00 Core Concepts in Anthropology;
- ~~6~~ additional credits at the 2000 level in anthropology from among AP/ANTH 2100, 2120, 2170 or 2200;
- AP/ANTH 3110 6.00 Acquiring Research Skills;
- AP/ANTH 4110 6.00 Development of Theory in Social Anthropology;
- ~~18~~ additional credits at the 3000 or 4000 level in anthropology of which at least 6.00 are at the 4000 level.

**Honours International BA Program (iBA)
(Students have to complete 42 credits in
Anthropology and a total of 120 credits.)**

- AP/ANTH 2110 6.00 Core Concepts in Anthropology;
- 12 additional credits at the 1000 or 2000 level in anthropology from among AP/ANTH 1120, 2100, 2120, 2130, 2170, 2200 or 2330.
- AP/ANTH 3110 6.00 Acquiring Research Skills;
- AP/ANTH 4110 6.00 Development of Theory in Social Anthropology;
- 12 additional credits at the 3000 or 4000 level in anthropology of which at least 6.00 are at the 4000 level.

Program Learning Outcomes:**Addition/ Removal of Courses**

Please describe how each course being added or removed will contribute to the program learning outcomes. *Please note: Proponents are asked to specifically make reference to the Degree-Level Expectations for the program/degree when completing this section.*

Course Number and Title	Add or Remove the course from the program?	Is the course <u>Required</u> or <u>Optional</u> ?	How will this course contribute to the program learning outcomes?
ANTH 1110 6.0		Optional	Fulfills our overall first year LO: "Looking at Problems Anthropologically". Students learn to: Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems. Evaluate the appropriateness of different theoretical approaches and research methodologies. To communicate accurately orally, and in writing. To understand how knowledges are produced by social relations and culture. And to learn and adhere to the principles of academic integrity.
ANTH 2130 6.0		Optional	These are Keystone courses for 2 of our 4 program focuses. Our core course (ANTH 2110) provides the in-depth "Disciplinary focus"; these courses fulfil the "Breadth" requirement.
ANTH 2330 6.0		Optional	These are Keystone courses for 2 of our 4 program focuses. Our core course (ANTH 2110) provides the in-depth "Disciplinary focus"; these courses fulfil the "Breadth" requirement.

Department of Anthropology
University Undergraduate Degree Level Expectations (UUDLEs)
Draft (tentatively adopted 17/2/2011)

1. Department of Anthropology Mission Statement

Sociocultural anthropology is a generative and integrative discipline that begins from the premise that human beings not only act but also think about their actions. What we study is the relationship between these two aspects of human behaviour across different contexts in time and space. What gives our discipline its generative power is our distinctive commitment to refining our concepts and methods through continuous reflection on the anthropologist's relationship to the social reality we witness and the people with whom we engage. Unlike other disciplines that focus on specific aspects of human experience, sociocultural anthropology integrates the broadest possible range of human experience, social and cultural, temporal and spatial, into these reflections.

What makes anthropology distinctive is our fieldwork method based on long-term participant-observation. Sociocultural anthropologists work with people in many different places around the world, with a commitment to understanding the day-to-day social reality of individuals and groups in different social and cultural settings. We work closely with people in open-ended research relationships best described as engaging in conversations that matter on all sides. Our research entails a process of entanglement with multiple historical and contemporary communities including the people with whom we work, students, and peers in Canada and abroad as well as the social and cultural worlds they inhabit. Our inherently reflexive scholarship thereby participates in questions and concerns that are often overlooked or marginalized and thus contributes to more inclusive and nuanced accounts of societies and cultures.

Our mission is to understand and convey how people around the world live their lives at the unpredictable edges of political, social, and cultural stability. Our uniqueness as sociocultural anthropologists is to engage in the critical analysis of how people are subject to, participate in, and contest the processes of living in a world that is now interconnected by new and powerful cultural, social, and technological forces.

Anthropological research aims for deep insights into power and change in human lives and worlds. Through our research, and through our teaching in our undergraduate and graduate programs, we make knowledge count by demonstrating how anthropological insights are vital to the practice of informed citizenship in today's world. As such, we see ourselves as being central to the Mission of both the Faculty of Liberal Arts & Professional Studies, and York University.

Section 2.

Degree Level Expectations

a) BA Program Major

1. Depth and Breadth of Knowledge:

- a. Understand and explain the key concepts, methodologies, theoretical approaches and technologies that comprise the field of social/cultural anthropology.
- b. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.

2. Knowledge of Methodologies:

- a. Demonstrate an understanding of methods of inquiry in sociocultural anthropology.
- b. Evaluate the appropriateness of different theoretical approaches and research methodologies.
- c. Learn to ask anthropological questions
- d. Initiating, developing and carrying out a research project.

3. Application of Knowledge:

- e. Make use of scholarly articles and primary sources of information as data.
- f. Effectively review, present, and interpret qualitative studies.
- g. Use a basic range of appropriate techniques to obtain and analyse information.

4. Communication Skills:

- a. Communicate accurately orally, and in writing.
- b. Articulate anthropological arguments and analyse accurately and effectively, orally and in writing.
- c. Synthesize and analyse information and arguments accurately and effectively, orally and in writing.
- d. Synthesize and analyse information and arguments accurately and effectively, orally and in writing, to a range of audiences (academic and non-academic, governmental and non-governmental, etc).

5. Awareness of Limits to Knowledge

- a. Understand how knowledges are produced by social relations and culture.
- b. By extension, understand that our own knowledge is constructed and limited by social relations and culture, and understand the limits to their own knowledge.
- c. Demonstrate an understanding of how knowledges and actions are constructed and limited by social relations and culture, and demonstrate an understanding of the limits of their own knowledge.

6. Autonomy and Professional Capacity:

- a. Learn and adhere to the principles of academic integrity.
- b. Demonstrate transferable skills necessary for decision-making in complex contexts; in particular, further study, employment, community involvement.
- c. Demonstrate an ability to learn independently.

c) Honours BA Minor (elaborate, what distinguishes a minor from major?)

1. Depth and Breadth of Knowledge:

- a. Understand and explain the key concepts, methodologies, theoretical approaches and technologies that comprise the field of social/cultural anthropology.
- b. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.
- c. Demonstrate a) and b) at an advanced, scholarly level.

2. Knowledge of Methodologies:

- a. Demonstrate an understanding of methods of inquiry in sociocultural anthropology.
- b. Evaluate the appropriateness of different theoretical approaches and research methodologies.
- c. Learn to ask anthropological questions
- d. Initiating, developing and carrying out a research project.

3. Application of Knowledge:

- a. Make use of scholarly articles and primary sources of information as data.
- b. Effectively review, present, and interpret qualitative studies.
- c. Use a basic range of appropriate techniques to obtain and analyse information.
- d. Demonstrate a), b) and c) at an advanced, scholarly level.

4. Communication Skills:

- a. Communicate accurately orally, and in writing.
- b. Articulate anthropological arguments and analyse accurately and effectively, orally and in writing.
- c. Synthesize and analyse information and arguments accurately and effectively, orally and in writing.
- d. Synthesize and analyse information and arguments accurately and effectively, orally and in writing, to a range of audiences (academic and non-academic, governmental and non-governmental, etc).
- e. Understand and demonstrate a), b), c) and d) at an advanced, scholarly level.

5. Awareness of Limits to Knowledge

- a. Understand how knowledges are produced by social relations and culture.
- b. By extension, understand that our own knowledge is constructed and limited by social relations and culture, and understand the limits to their own knowledge.
- c. Demonstrate an understanding of how knowledges and actions are constructed and limited by social relations and culture, and demonstrate an understanding of the limits of their own knowledge.
- d. Understand and demonstrate a), b), and c) at an advanced, scholarly level.

6. Autonomy and Professional Capacity:

- a. Learn and adhere to the principles of academic integrity.
- b. Demonstrate transferable skills necessary for decision-making in complex contexts; in particular, further study, employment, community involvement.
- c. Demonstrate an ability to learn independently.
- d. Understand and demonstrate a), b) and c) at an advanced, scholarly level.

b) Honours BA Major

1. Depth and Breadth of Knowledge:

- a. Understand and explain the key concepts, methodologies, theoretical approaches and technologies that comprise the field of social/cultural anthropology.
- b. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.
- c. Demonstrate a) and b) at an advanced, scholarly level.

2. Knowledge of Methodologies:

- a. Demonstrate an understanding of methods of inquiry in sociocultural anthropology.
- b. Evaluate the appropriateness of different theoretical approaches and research methodologies.
- c. Learn to ask anthropological questions
- d. Initiating, developing and carrying out a research project.

3. Application of Knowledge:

- a. Make use of scholarly articles and primary sources of information as data.
- b. Effectively review, present, and interpret qualitative studies.
- c. Use a basic range of appropriate techniques to obtain and analyse information.
- d. Demonstrate a), b) and c) at an advanced, scholarly level.

4. Communication Skills:

- a. Communicate accurately orally, and in writing.
- b. Articulate anthropological arguments and analyse accurately and effectively, orally and in writing.
- c. Synthesize and analyse information and arguments accurately and effectively, orally and in writing.
- d. Synthesize and analyse information and arguments accurately and effectively, orally and in writing, to a range of audiences (academic and non-academic, governmental and non-governmental, etc).
- e. Understand and demonstrate a), b), c) and d) at an advanced, scholarly level.

5. Awareness of Limits to Knowledge

- a. Understand how knowledges are produced by social relations and culture.
- b. By extension, understand that our own knowledge is constructed and limited by social relations and culture, and understand the limits to their own knowledge.
- c. Demonstrate an understanding of how knowledges and actions are constructed and limited by social relations and culture, and demonstrate an understanding of the limits of their own knowledge.
- d. Understand and demonstrate a), b), and c) at an advanced, scholarly level.

6. Autonomy and Professional Capacity:

- a. Learn and adhere to the principles of academic integrity.
- b. Demonstrate transferable skills necessary for decision-making in complex contexts; in particular, further study, employment, community involvement.
- c. Demonstrate an ability to learn independently.

- d. Understand and demonstrate a), b) and c) at an advanced, scholarly level.

d) Honours International BA Major

1. Depth and Breadth of Knowledge:

- a. Understand and explain the key concepts, methodologies, theoretical approaches and technologies that comprise the field of social/cultural anthropology.
- b. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.
- c. Communicate their knowledge in both English and a foreign language at the advanced level.
- d. Gain an international perspective in their Major discipline by studying abroad for at least one term; apply critical and analytical skills in a wide range of contexts specifically enhanced by an international perspective.

2. Knowledge of Methodologies:

- a. Demonstrate an understanding of methods of inquiry in sociocultural anthropology.
- b. Evaluate the appropriateness of different theoretical approaches and research methodologies.
- c. Learn to ask anthropological questions
- d. Initiating, developing and carrying out a research project.

3. Application of Knowledge:

- a. Make use of scholarly articles and primary sources of information as data.
- b. Effectively review, present, and interpret qualitative studies.
- c. Use a basic range of appropriate techniques to obtain and analyse information.
- d. Demonstrate a), b) and c) at an advanced, scholarly level.

4. Communication Skills:

- a. Communicate accurately orally, and in writing.
- b. Articulate anthropological arguments and analyse accurately and effectively, orally and in writing.
- c. Synthesize and analyse information and arguments accurately and effectively, orally and in writing.
- d. Demonstrate a), b), and c) in both English and a foreign language at the advanced level.

5. Awareness of Limits to Knowledge

- e. Understand how knowledges are produced by social relations and culture.
- f. By extension, understand that our own knowledge is constructed and limited by social relations and culture, and understand the limits to their own knowledge.
- g. Demonstrate an understanding of how knowledges and actions are constructed and limited by social relations and culture, and demonstrate an understanding of the limits of their own knowledge.
- h. Understand and demonstrate a), b), and c) at an advanced, scholarly level.

6. Autonomy and Professional Capacity: At both the University and as a student and ambassador at the exchange partner institution,

- e. Learn and adhere to the principles of academic integrity.
- f. Demonstrate transferable skills necessary for decision-making in complex contexts; in particular, further study, employment, community involvement.
- g. Demonstrate an ability to learn independently.
- h. Understand and demonstrate a), b) and c) at an advanced, scholarly level.

Section 3
Cummulative Progression of UUDLEs by Degree Year:

Year One: Looking at Problems Anthropologically

Year Two: Disciplinary Focus

Year Three: The Practice of Anthropology

Year Four: Advanced Theory

Year One (ANTH 1110): Looking at Problems Anthropologically

1. Depth and Breadth of Knowledge:
 - a. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.
2. Knowledge of Methodologies:
 - a. Evaluate the appropriateness of different theoretical approaches and research methodologies.
4. Communication Skills:
 - a. Communicate accurately orally, and in writing.
5. Awareness of Limits to Knowledge
 - a. Understand how knowledges are produced by social relations and culture.
6. Autonomy and Professional Capacity:
 - a. Learn and adhere to the principles of academic integrity.

Year Two (ANTH 2110): Disciplinary Focus

1. Depth and Breadth of Knowledge:
 - a. Understand and explain the key concepts, methodologies, theoretical approaches and technologies that comprise the field of social/cultural anthropology.
 - b. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.
2. Knowledge of Methodologies:
 - a. Demonstrate an understanding of methods of inquiry in sociocultural anthropology.
3. Application of Knowledge:
 - a. Effectively review, present, and interpret qualitative studies.
 - b. Use a basic range of appropriate techniques to obtain and analyse information.
4. Communication Skills:
 - a. Communicate accurately orally, and in writing.
 - b. Articulate anthropological arguments and analyse accurately and effectively, orally and in writing.
 - c. Synthesize and analyse information and arguments accurately and effectively, orally and in writing.
5. Awareness of Limits to Knowledge
 - a. Understand how knowledges are produced by social relations and culture.

- b. By extension, understand that our own knowledge is constructed and limited by social relations and culture, and understand the limits to their own knowledge.
 - c. Demonstrate an understanding of how knowledges and actions are constructed and limited by social relations and culture, and demonstrate an understanding of the limits of their own knowledge.
- 6. Autonomy and Professional Capacity:
 - a. Learn and adhere to the principles of academic integrity.
 - b. Demonstrate transferable skills necessary for decision-making in complex contexts; in particular, further study, employment, community involvement.
 - c. Demonstrate an ability to learn independently.

Year Two (Keystone Courses)

- 1. Depth and Breadth of Knowledge:
 - a. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.
- 3. Application of Knowledge:
 - a. Make use of scholarly articles and primary sources of information as data.
 - b. Use a basic range of appropriate techniques to obtain and analyse information.
- 4. Communication Skills:
 - a. Communicate accurately orally, and in writing.
 - b. Articulate anthropological arguments and analyse accurately and effectively, orally and in writing.
 - c. Synthesize and analyse information and arguments accurately and effectively, orally and in writing.
- 5. Awareness of Limits to Knowledge
 - a. Understand how knowledges are produced by social relations and culture.
 - b. Demonstrate an understanding of how knowledges and actions are constructed and limited by social relations and culture, and demonstrate an understanding of the limits of their own knowledge.
- 6. Autonomy and Professional Capacity:
 - a. Learn and adhere to the principles of academic integrity.
 - b. Demonstrate transferable skills necessary for decision-making in complex contexts; in particular, further study, employment, community involvement.
 - c. Demonstrate an ability to learn independently.

Year Two and Three Electives

- 1. Depth and Breadth of Knowledge:
 - a. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.
- 2. Knowledge of Methodologies:
 - a. Evaluate the appropriateness of different theoretical approaches and research methodologies.
- 3. Application of Knowledge:
 - a. Make use of scholarly articles and primary sources of information as data.

- b. Effectively review, present, and interpret qualitative studies.
- c. Use a basic range of appropriate techniques to obtain and analyse information.

Year Three (ANTH 3110): The Practice of Anthropology

1. Depth and Breadth of Knowledge:

- a. Understand and explain the key concepts, methodologies, theoretical approaches and technologies that comprise the field of social/cultural anthropology.
- b. Demonstrate critical thinking, analytical skills and be able to apply their learning to solve problems.

2. Knowledge of Methodologies:

- a. Demonstrate an understanding of methods of inquiry in sociocultural anthropology.
- b. Evaluate the appropriateness of different theoretical approaches and research methodologies.
- c. Learn to ask anthropological questions
- d. Initiating, developing and carrying out a research project.

3. Application of Knowledge:

- a. Make use of scholarly articles and primary sources of information as data.
- b. Effectively review, present, and interpret qualitative studies.
- c. Use a basic range of appropriate techniques to obtain and analyse information.

4. Communication Skills:

- a. Communicate accurately orally, and in writing.
- b. Articulate anthropological arguments and analyse accurately and effectively, orally and in writing.
- c. Synthesize and analyse information and arguments accurately and effectively, orally and in writing.

5. Awareness of Limits to Knowledge

- a. Understand how knowledges are produced by social relations and culture.
- b. By extension, understand that our own knowledge is constructed and limited by social relations and culture, and understand the limits to their own knowledge.
- c. Demonstrate an understanding of how knowledges and actions are constructed and limited by social relations and culture, and demonstrate an understanding of the limits of their own knowledge.

6. Autonomy and Professional Capacity:

- a. Learn and adhere to the principles of academic integrity.
- b. Demonstrate transferable skills necessary for decision-making in complex contexts; in particular, further study, employment, community involvement.
- c. Demonstrate an ability to learn independently.

Year Four (ANTH 4110): Advanced Theory

1. Depth and Breadth of Knowledge:

- a. Understand and explain the key concepts, methodologies, theoretical approaches and technologies that comprise the field of social/cultural anthropology.
- b. Demonstrate critical thinking, analytical skills and be able to apply their learning

- to solve problems.
- c. Demonstrate a) and b) at an advanced, scholarly level.
- 2. Knowledge of Methodologies:
 - a. Evaluate the appropriateness of different theoretical approaches and research methodologies.
 - b. Learn to ask anthropological questions.
- 3. Application of Knowledge:
 - a. Make use of scholarly articles and primary sources of information as data.
 - b. Effectively review, present, and interpret qualitative studies.
 - c. Use a basic range of appropriate techniques to obtain and analyse information.
 - d. Demonstrate a), b) and c) at an advanced, scholarly level.
- 4. Communication Skills:
 - a. Communicate accurately orally, and in writing.
 - b. Articulate anthropological arguments and analyse accurately and effectively, orally and in writing.
 - c. Synthesize and analyse information and arguments accurately and effectively, orally and in writing.
 - d. Understand and demonstrate a), b) and c) at an advanced, scholarly level.
- 5. Awareness of Limits to Knowledge
 - a. Understand how knowledges are produced by social relations and culture.
 - b. By extension, understand that our own knowledge is constructed and limited by social relations and culture, and understand the limits to their own knowledge.
 - c. Demonstrate an understanding of how knowledges and actions are constructed and limited by social relations and culture, and demonstrate and understanding of the limits of their own knowledge.
 - d. Understand and demonstrate a), b), and c) at an advanced, scholarly level.

Year 4 (electives): Add depth.

Change to Program/Graduate Diploma Academic Requirements Proposal Form

The following information is required for all proposals involving a minor modification to program/graduate diploma academic requirements. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. Program/Graduate Diploma: PhD, Economics

2. Effective Session of Proposed Change(s): September 2017

3. Proposed Change(s) and Rationale

a) A description of the proposed modification(s) and rationale, including alignment with academic plans.

1. Eliminate the field comprehensive exam
2. Move the Econometrics exam from Year 2 term 3 to Year 1 term 3
3. Move Econ7110 from year 2 term 2 to year 2 term 1
4. Introduce requirement of passing draft of paper comprehensive exam in Year 2 term 2
5. Move paper/presentation comprehensive exam from Year 3 November to Year 3 September

The proposed changes essentially allow students to seriously start their research in January of the second year, with efforts beginning as early as November of the second year of the PhD program, with the objective of having earlier completion times of their PhD program. The Econometrics comprehensive exam will be moved with the rest of the other 2 comprehensive exams to the third semester of the first year. Students will have two attempts within the same term to pass the comprehensive exams. Should they fail both attempts they will be withdrawn from the program.

It was felt that the field comprehensive exam did not add value to the program, as the courses taken in the given field, along with the paper presentation requirement in this field, was sufficient for the student to acquire the necessary tools to begin research in this field. This field exam, along with the Econometrics exam, are currently written during the third semester of the second year, thus preventing students from starting their research until these exams were written and passed. This field comprehensive exam is currently written during the third semester of the second year; the proposed program changes will eliminate this exam.

b) An outline of the changes to requirements and the associated learning outcomes/objectives, including how the proposed requirements will support the achievement of program/graduate diploma learning objectives. *Additionally, please append the graduate program's existing learning outcomes as a separate document.*

The main objective of the proposed program changes is for our PhD students to begin their research on their dissertation at an earlier stage of their program. The current structure of the program essentially allows students to first commit heavily on their research during early July of the second year.

In a student survey conducted by the Institute for Research at York University conducted a survey of the graduate students in the fall of 2014, where a common complaint documented by students was an unnecessary delay in starting their research. The current structure, with a course offered during the second semester of the second year, and comprehensive exams offered in May and June of the second year, prevented students from beginning their research until July of the second year. This issue was also brought up by the PhD students when they met the external reviewers on April 20, 2016 and was documented in the reviewers' responses to the program (see below).

We feel that the proposed changes will allow an earlier start on their research, without compromising on the course work and training leading up to their research. It is hoped the changes will also lead to earlier PhD completion times.

These changes are in alignment with York Universities' plans. Our graduate PhD economics program and the proposed changes not only satisfies the curricular standards of the discipline in terms of coverage (i.e., required courses and supervision) but it also exceeds them in terms of rigor. The objective of the PhD program is to prepare students mainly for academic careers and senior research positions in government and private corporations. As in most doctoral programs, the goals are to equip students with an in-depth knowledge of the core areas as well as that of their chosen fields. Graduates are expected to have acquired autonomy in conducting research and preparing scholarly publications. Our students will be able to understand and contribute to a particular topic/field in economics, given their specialized knowledge of the frontiers of economic theories and techniques of their chosen dissertation topic and field. They will thus be able to strongly compete on the job market and successfully publish in peer-reviewed journals.

c) An overview of the consultation undertaken with relevant academic units and an assessment of the impact of the modifications on other programs/graduate diplomas.

Where and as appropriate, the proposal must include statements from the relevant program/graduate diplomas confirming consultation/support.

After consulting and discussing with the external reviewers (Chris Robinson, Western Economics; Rose Ann Devlin, University of Ottawa Economics) during their on- site visit on April 20, 2016 for the Graduate Economics Program Cyclical Review, it became apparent that other Economics Departments were eliminating the need for a Field comprehensive exam, along other departments moving their Econometrics comprehensive exam during the first year. The rationale was to get graduate PhD students to start work on their research and dissertation at an early stage in the program.

These proposed changes were also discussed during the Graduate Program faculty meeting held on September 23, 2016. Members of the curriculum committee (Nippe Lagerlof, Ben Sand, Andrey Stoyanov, and George Georgopoulos) met on September 30 and came up with the proposed changes listed above. The proposed changes were then put to a vote to the Graduate Faculty, where the outcome of the vote on November 2 was 28 in favour of the proposed changes and 2 against.

d) A summary of any resource implications and how they are being addressed.

Attention should be paid to whether the proposed changes will be supported by a reallocation of existing resources or if new/additional resources are required. If new/additional resources are required, the proposal must include a statement from the relevant Dean(s)/Principal.

There will be no resource implications.

e) A summary of how students currently enrolled in the program/graduate diploma will be accommodated.

The proposed changes do not apply to currently enrolled students.

Table 1: Level Expectations for PhD in Economics

	I) Degree-Level Expectation <i>This degree is awarded to students who have demonstrated the following:</i>	II) Program Learning Objectives (with assessment embedded in outcomes) <i>By the end of this program, students will be able to:</i>	III) Appropriate Degree Requirement & Assessment <i>Align courses and assessment methods/activities with the program learning objectives.</i>
1. Depth and Breadth of Knowledge	A sound understanding of the latest techniques in economics, where students have successfully passed their regular and comprehensive exams, along with successfully defending their dissertation.	Students will be able to understand and contribute to a particular topic/field in economics, given their specialized knowledge of the frontiers of economic theories and techniques of their chosen dissertation topic and field. After the completion of the first and second year courses, students will acquire a general knowledge and conceptual understanding of the mathematical foundations of the latest economic theories and of the latest statistical techniques employed to analyze economic data in order to test theories and produce new economic insights. Demonstrate knowledge and applicability of the analysis of both quantitative and qualitative economic data.	a. Successful completion of six core courses in microeconomics (Econ5100, Econ6100), macroeconomics (Econ5110, Econ6110), and econometrics (Econ6220, Econ6250), along with two advanced courses in either micro (Econ7100), macro (Econ7110), or Econometrics (Econ7220) after two years. b. Passing of comprehensive exams in microeconomics, macroeconomics, econometrics, and a field course. c. Passing of the research paper component of the comprehensive field exam. d. Successful defense of dissertation.
2. Research and Scholarship	Students who are able to identify a contribution to the literature and present this contribution in a theoretically and/or empirically sound way.	a. Design a research strategy that will successfully present their contribution. b. Able to apply the latest microeconomic, macroeconomic and/or econometric technique to their research topic.	a. Successful completion of the required courses and comprehensive exams that will then reflect and understanding of the latest techniques in economics. b. Passing the paper based comprehensive exam, which includes presenting it to the

		c. Display the ability to formulate economic models in testable form and/or to apply econometric methods to estimate and test these models. d. Successfully publish in peer-reviewed journals.	field committee and other faculty members and PhD students in a seminar setting. c. Taking two of Econ7100, Econ7110, or Econ7220, where these courses have a course project and presentation component. d. Attendance and presentation of their dissertation work during the dissertation stage in Econ7000, where this includes receiving feedback from discussants and incorporating the suggestions in their research work. e. Attending seminar presentations of departmental and visiting faculty members. f. The presentation of their dissertation chapters in regular departmental seminars. g. The encouragement of presenting their dissertation work at conferences (for example, at the annual Canadian Economics Association meetings, and field specific conferences). h. Dissertation defense.
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3. Application of Knowledge	Students will develop the ability to apply the core methods and tools of economic analysis to the frontiers of their chosen field. Through a rigorous analytic approach founded on the importance of marginal decision making, scarce resources, and opportunity costs, they will also be able to study public policies from the perspective of companies and consumers and evaluate the effects of public policies on the welfare of society as a whole.	a. Apply common economic principles and concepts to new issues and phenomena found in everyday life, where they can take the tools learned from coursework and use them in the process of research. b. Review, present, and interpret evidence pertaining to an economic argument or economic model. c. Formulate an economic argument based on common economic principles, concepts, and models.	a. The application of their course work knowledge to the paper-based and presentation based comprehensive exam. b. Applying their knowledge in the project and presentation components of Econ7100, Econ7110, or Econ7220. c. The application of their course and research work in their Econ7000 twice annual seminar presentations. d. Application of their knowledge during the presentation of their dissertation chapters in regular departmental seminars and conferences. e. Application of their knowledge during their dissertation defense. f. Application of their knowledge to their journal-submitted papers.
4. Communication Skills	In supporting their research contributions, students will have demonstrated the ability to communicate economic arguments and conclusions clearly and be able to present quantitative information in a critical and coherent way.	a. Effectively communicate economic data through the use of tables, graphs, and statistics. b. To be able to effectively communicate economic ideas and research contributions to both an academic (students and researchers) and non-academic audience. They will also be able to formulate and present well-articulated arguments based on stated assumptions and hypotheses supported by empirical evidence.	a. Improving their written communication skills through their paper based projects in the Econ7000- based courses, along with their written dissertation chapters. b. Improving their presentation communication skills through their research presentations in their Econ7000-based courses, chapter presentations in departmental seminars, conference presentations, and dissertation defense. Feedback is given during each presentation, encouraging students to make arguments that are logical in reasoning and rationality.

			c. Each PhD student is entitled to teach at least one undergraduate course. This experience greatly enhances their communication skills on many levels, including building a positive learning environment between students and instructors.
5. Awareness of Limits of Knowledge	Students accepting that that there may be more than one approach to tackling an economic problem at the frontiers of economic knowledge and, consequently, that there may be more than one solution to the problem.	a. Display awareness that human behaviour is not always consistent with economists' assumptions regarding human nature as reflected in the hypothesis of the pursuit of self-interest. b. Understand that solutions to economic problems are constrained by the choice over which features of the economic environments in which the problems arise are assumed away (through simplifications and abstractions) and which parameters are taken as given or fixed for the purpose of setting up and solving the problems. c. Have an appreciation of what economic measurements can and cannot do because of data inaccuracies, of the difficulties in sampling a population, and of the possibility that conclusions drawn from data might be ambiguous. d. The limitations are particularly pronounced given that PhD students are working at the frontiers of economic knowledge.	a. Students will be aware of shortcomings on their work from feedback on their written work and presentations, as audiences are encouraged to question research methodologies and results, and such feedback will reveal such limitations. b. Researching at the frontier of an economic field or topic by nature exposes the student of various limitations. c. Annual activity reports are given to students which highlight the limitations of their progress, work, and knowledge within their field. d. Students will potentially be exposed to their limitations through the external reviewers' reports at the dissertation defense stage.

6. Autonomy and Professional Capacity	Has engaged in academic work and has worked independently and in a professional manner, acquiring skills that will assist in finding employment either in the academic or non-academic job market.	a. Produce and present high quality academic work that is consistent with the demands of the profession. b. Have familiarity with key concepts that are present in most of the decision problems they are likely to face in their careers. c. Will have the ability to take the initiative to investigate new ideas in the economics profession.	a. Students are encouraged to develop on their own research topics which encourages initiative taking. b. Frequent interaction with professors through their courses, seminars and conferences adds to their professionalism. c. Exposure to PhD students from other departments and universities during conferences enhances students understanding of the profession, along identifying and understanding the work being conducted in the fields. Such exposure help students identify the skills in demand in the profession, which ultimately will encourage them to acquire such skills on their path to employment. d. Their teaching experience, where techniques are taught to non-academics, will assist them to gain employment in a non-academic sector, increasing their employment options.
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Senate Guidelines and Procedures Governing Course Cross-listings, Exclusions and Substitutions

General Course Description Standards

Descriptions

Course descriptions should be concise summaries of the general purpose and learning outcomes of the course. Descriptions must include information about pre-requisites, co-requisites, historical course

Maintenance and Annual Review

It is the responsibility of the unit offering a course to maintain the accuracy of its course descriptions. Changes to course descriptions have an impact on scheduling, student enrolment and degree audit processes. Once course changes are finalized and approved by the respective Faculty Councils, units must coordinate with the Office of the University Registrar to effect the changes within their timelines for curriculum changes.

It is the responsibility of the unit offering the course to annually review course descriptions, including stated pre-requisites, co-requisites, historical course codes and course credit exclusions, to ensure the information included is current and reflects recent curricular changes.

1. Cross-Listed Courses

1.1 Definition

“Cross-Listed” courses are offered jointly by two or more teaching units. All instances of cross-listed courses are essentially the same course with different identifiers most commonly utilized to signify relevance to more than one particular discipline.

1.2 Impact to Degree Progress and Completion

Cross-listed courses must all have the same academic credit value and are not counted twice to fulfill degree requirements.

1.3 Establishing a Cross-Listing

Cross-listings of courses are arranged, changed and approved by agreement of all units or Faculties concerned. Proposals for new or revised courses must include approval by the respective Faculty curriculum committee in all units impacted.

1.4 Cross-Listing Description Standards

Normally, one course is designated as the “primary” offering within the course repository and all other subject identifiers are linked to the primary course. Cross-Listings are not part of the course description; however other course numbers are listed in course catalogues.

2. Course Credit Exclusions

2.1 Definition

“Course Credit Exclusion” is a formal status accorded to sets of courses that are recognized as having sufficient overlap in content. Although the courses may have a significant degree of overlap, they are

not considered fully equivalent. Students will not receive credit for both / all courses in a designated set of CCE's.

2.2 Impact to Degree Progress and Completion

Courses established as Course Credit Exclusions (CCE) are not equivalent; the use of a CCE course to fulfill a degree requirement must be either pre-determined by the program or approved on an individual basis for a student by a department. Completion of courses designated as CCEs will be subject to the Senate Policy on Repeating Passed or Failed Courses for Academic Credit.

While the relationship between pairs of courses which are course credit exclusions is fully reciprocal, it does not extend to other courses associated with either parent course. Two courses paired as CCEs may also separately list other courses as exclusions. Those courses are not automatically deemed as CCEs unless also listed as course credit exclusions of the paired courses.

It is the responsibility of programs and departments to advise students of the impact of enrolling in specific course credit exclusions.

2.3 Establishing a Course Credit Exclusion

Course credit exclusions are arranged and approved by the agreement of all the units or faculties concerned. Proposals for new or revised courses indicating course credit exclusions must include approval from all applicable units.

2.4 Description Standards

All course credit exclusions for a course are listed in the course description following the label "Course Credit Exclusions". The term must always be used in its plural form and used only if there are exclusions indicated. Both parent courses must state the CCE.

2.5 Annual Review

It is the responsibility of the units offering courses paired as Course Credit Exclusions to review and confirm them annually. Parent courses of a course credit exclusion that have not been offered for seven consecutive years, will be removed from the course description.

2.6 Course Credit Exclusions on Transfer Credits

Transfer credit awarded for studies at other institutions (upon admission, through a letter of permission, or exchange program) may result in York Course Credit Exclusions being identified for the completion of students' program requirements at York. Such cases are governed by the relevant program regulations and the Senate Guidelines on Transfer Credits

3. Course Substitutes

3.1 Definition

A "Course Substitute" is a descriptive term applied when a course is recognized as sufficiently similar to a required course in a degree or certificate program. Substitutions may be programmatic and offered to all students or individualized for a student with departmental approval.

3.2 Impact to Degree Progress and Completion

Substitutes are used to fulfill degree requirements in lieu of a specific required course. The substitutes may be program-wide and apply to all students who transfer into a program through a particular pathway, or approved by a department for an individual student. Course substitutions do not have reciprocal relationships such as course credit exclusions. It is the responsibility of programs and departments and the Office of the University Registrar to confirm approved course substitutions for students.

3.3 Establishing Substitutions

Programs may establish program-wide substitutions in recognition of an appropriate commonly used pathway to meet degree requirements for students transferring from another program or Faculty. No consultation is required with other departments or units. It is the responsibility of the program to periodically review and confirm its program-wide substitutions.

3.4 Communicating Substitutions

Substitutions are not stated on course descriptions. Approved program-wide substitutions should be stated in program requirements and included in calendar copy.

Substitutions granted and approved for an individual student are considered exceptions for the use of fulfilling degree requirements and must be communicated to the Office of the University Registrar for degree audit purposes.

Substitutions granted on the basis of transfer credit received for studies at other post-secondary institutions must be communicated to students through an assessment of transfer credit.

4. Previously

4.1 Definition

"Previously" is used to denote a previous identifier or number of a course. Courses may be re-labelled with new subject codes, year levels, Faculties or course numbers due to curricular changes or re-organizations among Faculties and units. Courses marked as "previous" versions are the same course and considered equivalents.

4.2 "Previously": Re-numbered or Re-labelled courses

4.3 Impact to Degree Progress and Completion

Courses labelled Previously are full equivalents and subject to the Senate Policy on Repeating Passed or Failed Courses for Academic Credit . They cannot be counted twice for fulfilling degree requirements.

Curricular changes that resulted in a significant change to the academic content of a course will be assessed to determine if a course credit exclusion is applicable.

Re-numbering and re-labelling of courses must be coordinated with the Office of the University Registrar to mitigate the impact on scheduling, student enrolment and degree audit processes.

4.4 Description Standards for Re-Labelled Courses

Re-numbered or re-labelled courses shall state in the course description all previous numbers and codes following the label “Previously”. If the course is also identified as a course credit exclusion or cross-listing with another course, the course description of the paired course must also be reviewed and adjusted accordingly.

4.5 Maintenance and Annual Review

It is the responsibility of the unit offering the course to annually review course descriptions to confirm course numbers and labels. Previous codes from courses not offered for seven consecutive years shall be removed from course descriptions.

5. Integrated Courses

5.1 Definition

“Integrated courses” are courses in which both graduate and undergraduate students (typically 4th year) enrol concurrently. They are governed by the Senate Policy and Guidelines on Integrated Courses and the practices and guidelines for cross-listed courses do not apply.

6. Associated Regulations

3.1 Implicated Policies and Guidelines

These Guidelines and Procedures have been developed in the context of, and consistent with the following related legislation and regulations:

Repeating Passed or Failed Courses for Academic Credit

Advanced Standing Policy

The Pan-Canadian Protocol on the Transferability of University Credits

Undergraduate Co-Registration Options with Ontario Post-secondary Institutions

The Pan-Canadian Protocol on the Transferability of University Credits

Approved program and degree regulations

Academic Policy, Planning and Research Committee

Report to Senate

At its meeting of February 16, 2017

APPRC met on February 9, 2017 and presents the following report to Senate for information. Members of APPRC welcomed the Chair of Senate, Professor Lesley Beagrie, as the Committee's newest member.

FOR INFORMATION

1. Report of the Sub-Committee on Organized Research Units

The Sub-Committee on Organized Research Units met on February 2 and reported that it had endorsed a proposal to suspend the York Institute for Health Research. Details are provided in the documentation attached as Appendix A.

2. Spotlight on the University Academic Plan 2015-2020: Priority 3, Enhanced Quality in Teaching and Student Learning

APPRC and Senate Executive have agreed that time should be set aside at meetings of Senate from January to June to highlight one of six priority areas of the University Academic Plan 2015-2020. The second is devoted to priority 3, *Enhanced Quality in Teaching and Student Learning*.

The purpose of highlighting priority areas at Senate meetings is to

- foster knowledge about goals and objectives, and address questions about the text
- make Senators aware of the opportunities – and, importantly, the supports – available to them
- open a space for dialogue with those who have special responsibilities and accountabilities in various domains
- identify concrete initiatives and share successes
- create a basis for ongoing monitoring of progress
- consider how University objectives can be pursued at the local and individual level

Senate embraced the current UAP in 2016. We hope and trust that current Senators will be champions for a document that stresses collegiality and community in 2017 and the years to come.

Vice-President Will Gage has agreed to help facilitate discussion at the Senate meeting of February 16. We are grateful to him for sensitively organizing his thoughts around the constituent elements of priority area 3. He will point to structures, processes and

Academic Policy, Planning and Research Committee

Report to Senate (cont'd)

initiatives in the area of teaching and learning. Yet his presentation will be a starting point to what APPRC hopes will be a lively discussion.

APPRC welcomes comments from Senators on any aspect of UAP priority area 3. It is suggested that contributors to the discussion prepare by reflecting on this question about their own recent teaching experiences:

How has your approach to teaching and learning changed in recent years in response to issues of experiential learning, technology, or internationalization, and how can you contribute to realizing the UAP objectives?

The text of priority area 3 reads as follows:

York has an outstanding and well-deserved reputation for high quality teaching and learning as supported by student surveys and cyclical program reviews, and has an opportunity to establish itself as a leader in pedagogical innovation. As a second top factor affecting students' decisions about where to study, further enhancing teaching and learning including the development of signature pedagogies has the potential to make a significant impact on our ability to realize our vision. We have already invested and made considerable progress in expanding experiential education and technology enhanced learning. Experiential education – by which we mean a variety of learning modes that involve problem-based inquiry, the application of knowledge, and involvement in career-preparation – enriches the curriculum and contributes to deep learning. University education is being transformed by new technologies and by burgeoning discoveries in pedagogical research that have been found to empower instructors and students and augment still-essential personal encounters. Notably, the value of alternative instruction modes is amenable to systematic, relatively easy monitoring. As we continue to pioneer new ways of learning we can – and should -- assess their worth continuously.

Teaching and research are fundamental to the University's mandate and identity. More than that, they are inseparable. This intimacy is expressed through research-infused instruction and opportunities for students to conduct research within courses and in other activities. York University is also an international university. We are at home in a world where social change is not just possible but necessary. We see every day the dramatic impact that our work makes on social policy and the difference that it makes for individuals, groups and societies around the globe. We are cognizant of our responsibility to foster international dialogue and international experiences in the curriculum.

The Teaching Commons continues to enhance the supports offered to faculty interested in exploring newly emerging tools that can enhance the learning experience.

Academic Policy, Planning and Research Committee

Report to Senate (cont'd)

In the next five years, we will:

1. Incorporate to the extent possible an experiential component in every program including activities such as classroom-based labs and studios, clinical and intensive labs, community based or community service learning, local or international internships or cooperative placements, field studies, research opportunities including capstone independent research projects, etc.
 - 1.1. Increase the number of EE opportunities both internally and on campus including for example student participation in Organized Research Units
 - 1.2. Develop the means by which to organize and track experiential education opportunities, problem-based inquiry and related strategies as is the case with online and blended courses
2. Expand technology enhanced learning including the number of courses, modules and programs available online or through blended learning
3. Expand internationalization in the curriculum as well as international experiences such as summer programs, international internships, and exchanges
 - 3.1. Enhancing student mobility including a commitment to flexible course scheduling and improved credit transfer
 - 3.2. Promoting opportunities for York students interested in studying abroad and broadening the diversity of their experiences
 - 3.3. Facilitate faculty member exchanges
4. Provide training and support for faculty members interested in incorporating experiential education, technology enhanced learning and other pedagogical innovation
 - 4.1. Continue to strengthen supports offered by the Teaching Commons
5. Provide students with timely, relevant information about courses they may choose or in which they have enrolled before classes have started

Les Jacobs, Chair

Academic Policy, Planning and Research Committee



Sub-Committee on Organized Research Units

Report to the full Committee

At its meeting of February 9, 2017

The Sub-Committee met on February 2, 2017 with all members in attendance and submits the following report to the full Committee for information.

FOR INFORMATION

1. Suspension of the York Institute for Health Research

The Sub-Committee has endorsed a proposal to suspend the York Institute for Health Research.

This does not mean that the charter is revoked. The Vice-President Research and Innovation did not ask that such a step – one requiring approval by the full Committee and Senate – be taken.

Details about the suspension and its rationale are set out in the document, attached as Appendix A, submitted to the Sub-Committee by Vice-President Haché and Associate Vice-President Haig-Brown. In addition, the Sub-Committee sought and received additional information about the impact of the suspension. In doing so it learned the following:

- the sponsoring Faculties for YIHR have been consulted and have also endorsed the suspension; they are committed to working with colleagues to explore options
- graduate students will continue to have opportunities to work with faculty members and be funded through individual faculty members' grants; while some networking and event-focused experiences through YIHR will not occur, graduate students will be welcomed at other health-themed ORUs
- provisions have been made for the routing of program and project evaluations that might otherwise have come through YIHR to appropriate researchers elsewhere

There are precedents for ORU suspensions. In the past such suspensions have been reported to the applicable Senate committee for information only. In this case the VPRI sought the active endorsement of the Sub-Committee, a step that paved the way to a full and frank discussion and is consistent with the accountability imperatives of the overall policy framework that governs ORUs.

Logan Donaldson, Chair

Academic Policy, Planning and Research Committee

Report to Senate (cont'd)

The Vice-President Research and Innovation is seeking endorsement by the Sub-Committee on Organized Research Units of a proposal to:

suspend indefinitely the Charter of the York Institute for Health Research effective February 5, 2017.¹

The primary reasons for the proposed action are:

1) Inability to secure a Director for the Centre.

In November 2015, with the chartering of the Dahdaleh Global Health Research Institute, uncertainty about the relationships and interrelationships between DGHRI and YIHR began. Starting in January 2016, VPRI and AVPR met numerous times with the Director and members of the Executive Committee of YIHR both together and individually to discuss the vision and practical ways moving forward for YHRI in the context of the DGHRI.

In late April, the Director submitted his resignation effective June 30. In mid-June the Executive of YIHR proposed a motion to close the YIHR primarily because of what was seen as replication of YIHR's mandate by DGHRI. At a subsequent meeting convened by the VPRI on June 30, before a final vote on the motion, the Executive agreed to suspend it and to continue work on plans for moving forward.

When efforts to recruit a new Director for July 1 proved fruitless, an Interim Director agreed, somewhat reluctantly, to serve till November 30. Several more meetings with the VPRI, the Executive and other health-researchers were held between August and the end of the year to consider and develop a proposal for moving forward. When it proved impossible to secure an Interim or Acting Director for December, the AVPR took over necessary oversight as administrator for YIHR.

At this time with the unsuccessful search for a Director, the Centre is left without leadership.

2) Financial Situation.

At this time, the Centre, with the redirection of research grants based in the uncertain future of YIHR, is lacking the financial resources to continue. A large deficit is predicted if operations continue to the end of April 2017. Prospects for recovery are lacking at this time.

Options for YIHR moving forward

- Charter expires June 30, 2019 if no further action occurs.
- There is potential to raise the suspension should a critical mass of committed health-researchers bring forward a viable proposal.
- There is also a potential to apply for a new charter for a distinct entity related to health research.

¹ The Secretary confirms that the process involves the Sub-Committee reporting its action to APPRC for information. APPRC will in turn inform Senate.

The Senate of York University – Minutes

Meeting: Thursday, January 26, 2017 at 3:00 pm Senate Chamber, N940 Ross, Keele

G. Comninel (Chair)	D. Hastie	J. O'Hagan
I. Roberge (Acting Vice-Chair)	R. Iannacito- Provenzano	S. Parsons
M. Armstrong (Secretary)	C. Innes	A. Perry
R. Allison	M. Jacobs	L. Philipps
C. Altilia	R. Jayawardhana	B. Pilkington
J. Amanatides	R. Kenedy	R. Pillai Riddell
T. Amandi	M. Khan	A. Pitt
K. Amoui	A. Khandwala	J. Podur
G. Audette	A. Kimakova	M. Rajabi Paak
P. Avery	J. Kirchner	A. Rakhra
S. Barrett	M. Kiumarsi	A. Rashad
A. Belcastro	T. Knight	A. Ricci
M. Biehl	J. Lazenby	L. Sanders
A. Blake	R. Lee	V. Saridakis
S. Bohn	R. Lenton	D. Scheffel-Dunand
I. Boran	D. Leyton-Brown	L. Sergio
G. Brewer	B. Lightman	M. Shoukri
H. Campbell	W. Maas	D. Skinner
J. Clark	L. Martin	P. Singh
B. Crow	M. McCall	A. Solis
M. Derayeh	P. McDonald	D. Steinfeld
J. Dowsett	A. Medovarski	N. Sturgeon
J. Edmondson	M. Mekouar	L. Taylor
C. Ehrlich	J. Mensah	K. Thomson
L. Farley	J. Michaud	C. Till
I. Ferrara	P. Millett	P. Tsasis
H. Fisher	M. Milo	E. van Rensburg
G. Georgopoulos	T. Moore	G. Vanstone
J. Goldberg	M. Morrow	R. Wellen
A. Golijanin	A. Mukherjee-Reed	R. Wildes
R. Grinspun	R. Mykitiuk	J. Wu
E. Gutterman	P. Nguyen	M. Zito
R. Haché	A. Norwood	

1. Chair's Remarks

Presiding over his final meeting as Chair, Professor George Comninel expressed appreciation to Senators for their ongoing support during his terms as Vice-Chair and Chair. He thanked his predecessor, Roxanne Mykitiuk, successor Lesley Beagrie, and University Secretary Maureen Armstrong and her University Secretariat colleagues for their assistance and guidance. He spoke of an experience that was both enlightening and enriching, and he urged Senators to sustain and enhance collegial governance, which remains essential to the life of the University.

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As he had on several previous occasions, Professor Ian Roberge served as Acting Vice-Chair for the meeting and the Vice-Chair-elect, Franck van Breugel, was introduced and welcomed. The Chair expressed condolences on the passing of three individuals who had contributed to Senate and its committees over the years: Dean David Bell, Professor David Logan and Professor Tim Edgar.

2. Business Arising from the Minutes

There was no business arising from the minutes.

3. Inquiries and Communications

a. Report of the Academic Colleague to the Council of Ontario Universities

The Academic Colleague to the Council of Ontario Universities, Professor David Leyton-Brown, reported on recent facilitated discussions at colleagues' meetings devoted to quality indicators, experiential learning and student learning outcomes.

4. President's Items

York's President, Dr Mamdouh Shoukri, joined in celebrating Professor Comninel and in doing so stressed the outgoing Chair's depth of governance knowledge and experience. The President was pleased to report that applications to York from high school graduates were running well ahead of the system average and results for other GTA universities. A 5.4 per cent rise in first choice applications was especially heartening, and he praised those responsible for strategic enrolment management strategies and to all members of the community for helping to achieve an impressive boost. Applications from those not coming directly from high school were also forecast to be strong. The focus will now fall on converting applicants into registrants.

Dr Shoukri also commented on the following:

- a visit to the Keele campus by Premier Wynne and her encounters with students
- final confirmation of government funding for the Markham Centre Campus, a milestone that coincides with the accelerating development of academic program proposals that will inform the design of the facility
- the status of a provincial postsecondary funding review and its relationship to the pending Strategic Mandate Agreement negotiations
- the tuition fee framework announced by Queen's Park (no decision has yet been made on how the three per cent overall cap will be applied at the University)
- approval by the Board of Governors of a *Policy on Sexual Violence* and steps to its implementation
- efforts to improve participation rates for the National Survey of Student Engagement

In response to questions about risks associated with demographic trends and policy contexts, the President stressed the need for the community to rally around the vision of

The Senate of York University – Minutes

York as a comprehensive, research-intensive institution and to contribute to its realization.

Committee Reports

5. Executive Committee

a. Nominees for Election to Senate Committee and Other Nominations

It was moved, *seconded* and *carried* “**that nominations be closed.**” As a result of the vote, members were acclaimed to the Appeals Committee, Awards Committee, Tenure and Promotions Committee, and Tenure and Promotions Appeals Committee. An e-vote will be conducted to nominate one of the two Senators on the Board and to elect members of Academic Standards, Curriculum and Pedagogy.

b. Information Items

Senate Executive reported on the following items:

- its approval of Faculty Council nominees for membership on Senate committees
- remaining committee vacancies for 2017 – 2020 terms and the positive impact made by changes in the nominations process instituted in 2016
- timelines for the bi-annual review of Senate membership
- confirmation that changes to Faculty Council rules and procedures submitted by Graduate Studies and Science were consistent with principles of collegial governance and practices elsewhere at the University
- establishment of a group comprised of members of the Senate and Board Executive committees to consider the re-appointment of the Chancellor, and an invitation to comment on the prospect of re-appointing Chancellor Sorbara
- timelines set by the Sub-Committee on Equity for the completion of its review of the Senate Policy on Accommodations for Students with Disabilities

c. Salute to Professor Comninel

Senators applauded Professor Comninel as he received and flourished a commemorative gavel presented to him by the Secretary.

6. Appeals

The Appeals Committee filed its annual report on Faculty and Senate adjudications.

7. Academic Standards, Curriculum and Pedagogy

a. Establishment of a York-Seneca Co-Registration Option for the Honours BSc Program in Chemistry • Department of Chemistry, Faculty of Science

It was moved, *seconded* and *carried* “**that Senate establish a York University - Seneca College co-registration option for the Honours BSc program in Chemistry**”

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housed in the Department of Chemistry, Faculty of Science, as set out in Appendix A.”

- b. Changes to the PhD Program in Computer Science, Graduate Program in Electrical Engineering and Computer Science, Lassonde School of Engineering / Faculty of Graduate Studies

It was moved, seconded and *carried* “**that Senate approve the following changes to the PhD program in Computer Science:**

- **change of the name of the degree program from “PhD in Computer Science” to “PhD in Electrical Engineering and Computer Science”**
- **addition of fields in: Computer Engineering; Computer Science; Electrical Engineering; and Software Engineering**
- **change in admission requirements**
- **change in degree requirements**
- **expansion of the time to completion requirements**

- c. Closure of the Joint York-Seneca BSc (Tech) Program in Applied Biotechnology, Department of Biology, Faculty of Science

It was moved, seconded and *carried* “**that Senate approve the closure of the Joint York University – Seneca College BSc (Tech) program in Applied Biotechnology.**”

- d. Information Items

ASCP advised that the Registrar has agreed to adopt a three-year outlook for Sessional Dates and described an editorial amendment to the Senate Policy and Guidelines on Withdrawn from Course (W) Option. Modifications to curriculum and degree requirements approved by the Committee in December and January were the following:

Glendon

- minor changes to the Certificate in Technical and Professional Communication, School of Translation
- establishment of LYON as a new rubric for the York-EM Lyon Dual Credential BBA – ILST program, Department of International Studies

Health

- minor changes to the degree requirements for the Specialized Honours BA and BSc programs in Global Health

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Liberal Arts & Professional Studies

- minor changes to the degree requirements for the BSW program, School of Social Work
- minor changes to the degree requirements for the Honours BA program in Children's Studies, Department of Social Science
- minor changes to the degree requirements for the 90-credit BA in Linguistics, Department of Languages, Literatures and Linguistics
- adoption of DEMS as a rubric for the Bachelor of Disaster & Emergency Management program (in addition to use by the graduate programs), School of Administrative Studies

Science

- a minor change to the requirements for the Honours Minor degree option in Biology, Department of Biology

8. Academic Policy, Planning and Research

a. Minor Amendment to the Senate Policy on Organized Research Units

It was moved, seconded and *carried* **“that Senate approve a minor amendment to the Policy on Organized Research Units by deleting the words “Transition Provisions” from the title of clause 7; and by deleting the sentence in the clause that reads: “In the interest of a gradual and orderly transition to the chartering model set out in this Policy, all current charters shall continue until each ORU’s next scheduled review or June 30, 2015, whichever comes first.”**

b. Discussion of the Strategic Mandate Agreement

Provost Lenton briefed Senate on the nature, conceptual approach, goals, timelines and potential impact of negotiations leading to the second Strategic Mandate Agreement between the province and Ontario universities. The University Academic Plan 2015-2020 will be the basis for the University's position. New templates are in development for the exercise.

c. Spotlight on the University Academic Plan: Priority Area 2

A centerpiece of the meeting involved a facilitated discussion of objectives in *University Academic Plan 2015-2020* priority area 2 (Advancing Exploration, Innovation and Achievement in Scholarship, Research and Related Creative Activities). It was noted in the APPRC report and by some speakers that York is and will be subject to indicators, and that measurement could be injurious to funding and enrolments (especially at the graduate level). It would be helpful if the collegium engages in developing more inclusive and qualitative metrics and by suggesting ways in which conventional indicators could be used to greatest advantage. APPRC members were well aware of long standing concerns about metrics, and UAP objectives relate to aggregate data only.

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APPRC's intention was not to foreclose dialogue after the meeting but to help sustain positive, productive discussions that could further the UAP and help position York for the SMA negotiations.

Among the comments made were the following:

- there are inherent difficulties and distortions associated with the measurement of research whereby traditional indicators downplay or miss significant activities; peer review is and should remain of paramount relevance in the assessment of research
- understanding why York is not reaching its self-defined goals requires a longer, deeper, wider discussion
- there are worries that indicators could be used for the purpose of individual performance assessment
- York's message to governments and funding agencies should be that the shortcomings of metrics are increasingly well documented and are inimical to sound public policy
- indicators discount or exclude research in the Humanities (where there are fewer dollars available from SSHRC); international collaborations are not always considered germane in certain disciplines
- a priority should be the development of a comprehensive list of research activities and the collection of data in open, transparent ways
- some research databases are superior to others when it comes to capturing research (Scopus is sometimes deemed the most reliable in this regard), and the willingness to offer opportunities to York to identify gaps
- some departments openly celebrate research achievements, and do so in a collegial way
- the Libraries have compilations that can be shared with Senators, and one way to both profile and track research is through social media
- York is a powerhouse in large-scale, collaborative research, a fact that should be exploited

Some Senators were concerned that the timelines for consultations with Faculty Councils on tracking progress were too compressed and that the framing questions posed by APPRC falsely assumed that indicators were both valuable and reliable. It was suggested that APPRC should seek out a presentation on indicators given at Osgoode.

d. Other Information Items

APPRC reported that it had elected Professor Les Jacobs as Chair from January to June 2017. It also provided information on the questions to be explored in upcoming meetings with the Deans, Principal and University Librarian and consultations with Faculty

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Councils on tracking progress on academic objectives. APPRC conveyed the most recent report of the Sub-Committee on Organized Research Units.

9. Other Business

There being no further business it was moved, seconded and *carried* “**that Senate adjourn.**”

Consent Agenda Items

10. Minutes of the Meeting of November 24, 2016

The minutes of the meeting of November 24, 2016 were approved by consent.

11. Changes to Degree Requirements, Master of Social Work, Faculty of Graduate Studies

Changes to degree requirements for the Master of Social Work, Faculty of Graduate Studies, were *approved by consent*.

12. Changes to Degree Requirements, BFA Program in Visual Arts, Faculty of Arts, Media, Performance and Design (for approval)

Changes to degree requirements for the BFA Program in Visual Arts, Faculty of Arts, Media, Performance and Design were *approved by consent*.

13. Changes to Degree Requirements, BDEM Program in Disaster and Emergency Management Program, Faculty of Liberal Arts and Professional Studies (

Changes to degree requirements for the BDEM Program in Disaster and Emergency Management Program, Faculty of Liberal Arts and Professional Studies were *approved by consent*.

14. Senators on the Board Governors re: Synopsis of the Board Meetings of November 29 and December 14, 2016

a. Senate’s nominees to the Board of Governors

Senate’s nominees on the Board of Governors, Professors Bernard Lightman and Lauren Sergio, presented synopses of the Board meetings of November 29 and December 14, 2016.

G. Comninel, Chair _____

M. Armstrong, Secretary _____