REPORT OF ACADEMIC STANDARDS COMMITTEE
Report #F2013–2; November 2013

In this report the Academic Standards Committee (ASC) brings to Senate its evaluation and recommendation on the following items:

- Minor in Geography from the Department of Geography
- Minor in Geographic Analysis from the Department of Geography
- Minor in Environment and Urban Sustainability from the Department of Geography
- Admission Requirement Modifications for the Bachelor of Social Work
- Film Studies Curriculum Modification in the School of Image Arts
- Photography Studies Curriculum Modification in the School of Image Arts
- Optional Specialization in Engineering Innovation and Entrepreneurship
- Admissions Changes in Health Services Management and Health Information Management
- Name change in the Department of Criminal Justice and Criminology
- Modifications to the Civil Engineering Curriculum

A. MINOR IN GEOGRAPHY

1. OVERVIEW

The Geography Minor provides Ryerson students with a set of courses to acquire a good understanding of the complex connections that human beings have with their natural and built environments. The Minor adds breadth to students' program of study and enhances their career possibilities. In particular, this minor serves the needs of the students who wish to pursue a teaching profession with Geography as a second "teachable" subject.

- The Geography Minor is administered and delivered by the Department of Geography. The entire curriculum is based on existing courses.
- The Geography Minor is not available to students in the Geographic Analysis program.
- The Geography Minor consists of six courses as indicated below. Courses in the Minor are categorized into three groups, by both level and type of courses, to encourage students to acquire a breadth of knowledge.
- The categorization of courses in the Minor is intended to assist students in selecting appropriate courses. With the exception of the Required Foundation courses and courses connected by pre-requisites, the students are free to take the courses in any order.
- The *Geography Minor* requires either GEO151 or GEO131 as a foundation course.

2. CURRICULUM

To receive the Minor, a student must complete six courses from the following course of study:

Table 1 *Geography Minor* Curriculum

One of the following required foundation courses			**Pre/anti/co-requisite**
GEO	151	Location, Location, Location	
GEO	131	Energy, Earth, and Ecosystems	
Two of the following topical foundation courses			
GEO	106	Geographies of Everyday Life *	
GEO	108	Geography of the Global Village *	
GEO	110	The Physical Environment *	

GEO	131	Energy, Earth, and Ecosystems	
GEO	151	Location, Location, Location	
GEO	206	Regions, Nations and the Global Community *	
GEO	208	Geography of the Global Economy *	
GEO	210	Geography of Danger *	
GEO	312	Viva Las Vegas! *	
GEO	231	Principles of Demography	
GEO	351	Internal Structure of the City	Prerequisite GEO 151 or GEO 418
GEO	372	Global Shift in the 21st Century	or GEO910 (not both)
GEO	910	Structure of the Global Village	or GEO372 (not both)
GEO	581	GIS, Geographic Data and Mapping	
Three of the following topical specialization courses			
GEO	505	Regional Analysis of Canada *	
GEO	507	Explorations of the Urban Environment *	
GEO	509	Food, Place and Identity *	
GEO	527	Inequalities in Urban Neighborhoods	
GEO	530	Urban Economic Geography	
GEO	551	Urbanization and Regional Development	Prerequisite GEO 151 or GEO 418
GEO	553	Studies in Rural Geography	
GEO	605	The Geography of the Canadian North *	
GEO	607	Cities and the Canadian Economic Landscape *	
GEO	609	cyberspace@geography.ca *	
GEO	627	Accessibility of Urban Social Services	
GEO	681	GIS and Geographic Analysis	
GEO	691	Canadian Immigration: Patterns and Place	
GEO	702	Technology and the Contemporary Environment *	Anti-requisite GEO703
GEO	703	Perspectives on Environmental Management	Anti-requisite GEO702
GEO	716	Geographies of Health *	
GEO	793	The Geography of Toronto *	
GEO	802	The Geography of Recreation and Leisure *	Anti-requisite GEO803
GEO	803	Recreation and Tourism Analysis	Anti-requisite GEO802
GEO	811	Global Environmental Issues *	

* A maximum of two (2) GEO (Geography) liberal study courses may be selected

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Minor in Geography from the Department of Geography.*

B. MINOR IN GEOGRAPHIC ANALYSIS

1. OVERVIEW

The discipline of geography provides students with an understanding of the complex connections people have with their natural and built environments. This understanding helps students to develop real-world solutions to issues surrounding urban growth, economic development, climate change or environmental remediation.

Each year, a large number of students in other academic programs at Ryerson University choose to take courses offered by the Department of Geography, to fulfill their program requirements as either Professionally-Related

(PR) or Liberal Studies (LS) courses. Many would like to acquire a Geographic Analysis Minor needed either for a teaching career or for enhancement of their own professional career. The Minor will also provide an opportunity to enhance the professional careers of the students in other disciplines such as Business Management, Marketing, Planning, Civil Engineering, and Architecture.

- The Geographic Analysis Minor is administered and delivered by the Department of Geography. The entire curriculum is e based on existing courses.
- The Geographic Analysis Minor is not available to students in the Geographic Analysis program.
- The Geographic Analysis Minor consists of six courses as indicated below. Courses in the Minor are categorized into three groups, by both level and type of courses, to encourage students to acquire a breadth of knowledge.
- The categorization of courses in the Minor is intended to assist students in selecting appropriate courses. With the exception of the Required Foundation course and courses connected by pre-requisites, the students are free to take the courses in any order.
- The Geographic Analysis Minor requires one foundation course: GEO151.

2. CURRICULUM

To receive the Minor, a student must complete six courses from the following course of study:

Table 1 *Geographic Analysis Minor* Curriculum

Required foundation			**Pre/anti/co-requisite**
GEO	151	Location, Location, Location	
1 of the following introduction to GIS			
GEO	581	GIS, Geographic Data and Mapping	
GEO	714	GIS for the Municipal Professional I	
GEO	719	GIS in Business: Strategic Management Decisions	
4 of the following specialty			
GEO	131	Energy, Earth, and Ecosystems	
GEO	231	Principles of Demography	
GEO	301	Marketing Geography	Anti-requisite: GEO302
GEO	302	Retail Location	Anti-requisite: GEO301
GEO	351	Internal Structure of the City	
GEO	419	Retailing, GIS and Geodemographics	
GEO	527	Inequalities in Urban Neighborhoods	
GEO	530	Urban Economic Geography	
GEO	551	Urbanization and Regional Development	
GEO	627	Accessibility of Urban Social Services	
GEO	681	GIS and Geographic Analysis	
GEO	691	Canadian Immigration: Patterns and Place	
GEO	724	GIS for the Municipal Professional II	Prerequisite GEO714 or GEO719*

* The 2014-2015 calendar will be edited to include GEO 719 as a prerequisite for GEO 724

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Minor in Geographic Analysis from the Department of Geography.*

C. MINOR IN ENVIRONMENT AND URBAN SUSTAINABILITY

1. OVERVIEW

The Department of Geography is proposing a Minor in Environment and Urban Sustainability (EUS). The proposed Minor provides the opportunity for students in those programs with close relationships to matters related to environmental and sustainability to enhance their professional knowledge, and for others to develop the sort of deeper appreciation of the scientific, technological, and socio-cultural scope of contemporary environmental challenges which is warranted in today's world. The structure of the Minor will lead a student to develop some depth of understanding about contemporary environmental issues while, through the range of options available, permit the Minor to be customized to the student's interests and needs.

This proposal retains the interdisciplinary spirit of the EUS BA degree program by allowing a broad range of relevant courses to be incorporated into the Minor. At the same time it provides a consistent focus on contemporary environmental problems through the requirement that at least four of the courses be EUS courses. All EUS courses in the Minor are offered in a lecture format which could accommodate increased numbers.

The Minor will be governed and administered by the Department of Geography. Program departments would continue to control enrolment in all Group C courses.

2. CURRICULUM

The Minor consists of six one-semester courses. The required foundation courses (2) are necessary to understand environment and urban sustainability. The topical and specialization courses will permit students to develop their own interests by offering choice from among a wide variety of courses. It should be noted that the topical and specialization course categorization is for guidance purposes and to ensure students take the right balance from each group (B and C).

A number of the courses listed in Group C have pre-requisites. The inclusion of these courses permits students who choose to take specific courses as part of their own degree program to apply up to two of these to the Minor. This may encourage some students to opt for environmentally-focused courses as part of their degree programs. Because the EUS program is a quasi-professional program it is important that the courses listed in Group C be courses that correlate well to the field of Environment and Urban Sustainability.

Environment and Urban Sustainability Minor **Six courses as grouped and noted below.**		**Pre/anti/co-requisite**
Group A (Required Foundation Courses)		
EUS 102	Environment and Sustainability (F)	
EUS 202	Sustaining the City's Environment (W)	
Group B (minimum of two courses for Topical Foundation)		
EUS 450	Climate Change: Science, Mitigation and Adaptation (F)	
EUS 550	Sustainable Cities: A Comparative Review (W)	
EUS 650	Waste and Waste Management (W)	
EUS 750	Sustainable Transportation and Energy Strategies (F)	
EUS 760	Cities at Risk (F)	
EUS 850	Sustainability in Organizations (W)	
EUS 860	Measuring Sustainability (W)	
EUS 870	Ecological Restoration (F)	
Group C (Up to two courses Specialization):		
ASC 200	Sustainable Practices: Principles (W)	Prereq: ASC 102 and PCS 107
ASC 501	Architecture Science: Sustainable Housing Design (F)	
ASC 852	Landscape and Ecological Design (F)	
ASC 855	Designing with Green Building Ratings (W)	
BLG 340	Environmental Biology (W)	Prereq: BLG 151 and (CHY 261 or BCH 261)
BLG 401	Ecotoxicology (W)	Prereq: BLG 143 and BLG 144 and CHY 242
CHY 423	Environmental Science (W)	Prereq: BLG 144 and CHY 113 and CHY 142
ECN 502	Economics of Natural Resources (F)	Prereq: ECN 104 or Direct Entry, Antireq: ECN 511
ECN 510	Environmental Economics (W)	
ECN 511	Economy and Environment (F) (UL)	Antireq: ECN 510
ENH 617	Applied Ecology (W)	
ENH 424	Water Quality (W)	
ENH 524	Pollution Control (W)	
ENH 825	Risk Assessment (W)	
GEO 411	Resource and Environmental Planning (W)	Prereq: GEO 131 Antireq: GEO 504
GEO 514	Resource Management in Northern Canada (F)	Prereq: GEO 131 Antireq: GEO 809
GEO 671	Developmental and Environmental Law (W)	
HST 788	Water Use in History (F) (UL)	
HIS 828	Science, Corporations and the Environment (W)	
HTT 510	Sustainable Tourism Development (W)	Prereq: HTT 303
IDE 309	Sustainable Design (W)	
LAW 535	Environmental and Business Law (F)	Prereq: LAW 122
OHS 322	Introductory Toxicology (F)	Prereq: CHY 104 and CHY 152
OHS 422	Advanced Toxicology (W)	Prereq: OHS 322 or OHS 311 Antireq: OHS 411
PHL 525	Environmental Ethics (F)	
PLE 715	Environmental Assessment (F)	Prereq: PLG 420 or in UP002 or UP003
PLE 835	Ecological Design (W)	Prereq: PLG 420 or in UP002 or UP003
POL 377	Urban Sustainable Policy (F)	
POG 415	Environmental Politics and Policy (W)	Prereq: POG 214 or POG 314 or POL 377 or PPA 211 or PPA 623
SOC 708	Environmental Sociology (F)	Prereq: SOC 104 or SOC 105 or SOC 107

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Minor in Environment and Urban Sustainability from the Department of Geography.*

D. ADMISSION REQUIREMENT MODIFICATIONS FOR THE BACHELOR OF SOCIAL WORK

1. BACKGROUND

This proposal reconfigures the School of Social Work admissions process for its Advanced Standing Program. The proposal provides a solution to some longstanding issues raised by Advanced Standing students and also provides a way to align the admissions policies with actual admissions practices.

2. CURRENT ADMISSIONS MODEL FOR ADVANCED STANDING BSW PROGRAM

(from Ryerson's Undergraduate Calendar)

ADVANCED STANDING ADMISSION: *Two years of study following university or community college.* ***Admission is available to the Part-time Advanced Standing program ONLY.***

Admission to Advanced Standing is to third year of the program in the Fall term only and is available on a part-time study basis. The number of admissions is limited by space availability.

Consideration for admission to Advanced Standing (in third year) will be given to students who have the following qualifications; (A) and (C) or (B) and (C):

(A) *Holders of a baccalaureate degree in the humanities or social sciences from a Canadian university (or equivalent) who have at least two years of accumulated employment in the social service field.*

OR

(B) *Holders of a Social Service or Human Services Counselor diploma from a Canadian Community College (or equivalent), who have at least a 'B' level average, plus completion of three, one-term, university liberal studies courses, one lower level and two upper level, NOT first year/first level (lower level) Psychology, Politics or Sociology, with at least a 'C' level grade in each course.*

AND

(C) *Completion of a prerequisite course, CVSW15A/B Foundations of Social Work II with at least a 'B' level grade.* ***Liberal studies and employment prerequisites must be successfully completed prior to taking CVSW15A/B.*** *Admission to CVSW15A/B is limited by space availability.* ***Applicants will be pre-selected to take this course by Undergraduate Admissions and Recruitment in conjunction with the School of Social Work****. Applicants will be selected based on post-secondary academic performance and/or employment in the social service field. Students approved to this program are not eligible to receive further transfer or challenge credits.*

3. ISSUES WITH STATUS QUO

For all applicants (i.e. university or college graduates)

- The advanced standing program is extremely competitive. Because of this, the School admits applicants whose qualifications far exceed the minimum requirements. For example, successful applicants normally have more than two years of relevant paid work experience.
- Currently, no further challenge credits are allowed. Students must do all of the courses contained in the third and fourth years of the BSW curriculum, including both field placement courses. This is redundant because this group of students is admitted with experience in the social services field and therefore do not need to complete two field placement courses. Instead, they would benefit from more course work.

For college graduates of Social Service Worker (SSW) or Human Service Counselor (HSC) programs
As well as the issues noted above:

- The current formal admission criteria indicate that no work experience is needed for college graduates. However, in actual practice, because the program is so competitive, it has become a requirement. Applicants with no relevant paid work experience almost never get accepted into the advanced standing program.
- The current admission model requires college graduates to complete three liberal studies courses before they are eligible to apply to the Advanced Standing program. However, as noted above, without work experience they are not likely to be admitted to the program. Requiring this group to pay tuition for, and complete, three University level courses when they are unlikely to be accepted regardless of how well they might do in these courses is unfair.
- College graduates are looking for pathways into BSW programs as demonstrated by the number of applicants to the current Advanced Standing Program each year.

4. PROPOSED NEW ADMISSION MODELS – New Pathways into the Bachelor of Social Work

1. *Proposed revision to current model for admission to advanced standing (3rd year, part-time) for college graduates of Social Service Worker (SSW) or Human Service Counselor (HSC) programs*

Admission criteria:

1. SSW or HSC diploma
2. 3.0 GPA
3. At least two years paid, full time, relevant work experience in social services
    - If all of the above are met then potential students can apply to the Advanced Standing program and potentially be admitted to the part-time program, entering at 3rd year of the BSW.
    - Note that differences from status quo are: (i) 3 liberal studies are not required as pre-conditions to application to the program; (ii) work experience is required for all.
    - If accepted, then students must take the prerequisite courses, CVSW 15A/B (Foundations of Social Work) and must achieve at least a "B" level grade. (This is status quo with current model)

Upon admission the following occurs:

- Four "reach-back" courses are assigned (3 liberal studies -- 1 lower level and 2 upper levels, and SWP 331 -- Social Work Theories of Practice -- a course from year 1 of the BSW). Status quo is that these 3 liberal studies courses are eligibility requirements, whereas now they become part of the program to be completed after admission is granted.
- Transfer credits are granted for SWP 36 A/B (based on prior education and experience). Because of the four assigned reach-back courses, these students can be granted transfer credits for SWP 36A and SWP 36B and still meet the 50% residency requirement. Note that while SWP 36A/B are two courses, they count as four for tuition calculation purposes; i.e. SWP 36A/B = 4 billing units.
- For those students entering into the Advanced Standing Program with a prior University Degree, appropriate transfer credits and reach back courses will be determined on an individual basis.

Advantages of this model:

- It makes transparent the fact that two years of work experience is required for admission.
- It exempts students from the third year field placement courses, a decision which is supported by students, the School and the School's accrediting body - the Canadian Association for Social Work Education (CASWE).
- It ensures this cohort will have the knowledge covered in an important first year course, SWP 331, Social Work Theories of Practice.
- It deals with the unfairness aspect of requiring potential applicants to complete three liberal studies courses when they are not likely to get into the program even if they are successful in these courses.
- Although the change adds two extra courses to the curriculum (i.e. exchanging SWP 36A/B for four other

courses), it is the field placement courses that are the most difficult for this cohort of students to complete due to their intensive nature. This group would actually find it easier to complete the program in this model due to the nature of their personal and professional lives and the difficulty engaging in 14 hours per week of field placement.

2. Proposed new admissions model (block entry to 2nd year of the full-time BSW) for college graduates of Social Service Worker (SSW) Or Human Services Counselor (HSC) programs

Admission criteria:

1. SSW or HSC
2. 3.0 GPA
3. Less than 2 years paid, full time, relevant work experience in social services
    - If all of the above are met then potential students can apply for direct entry to 2nd year of the full-time BSW program.

Upon admission the following occurs:

- Two "reach-back" courses are assigned: 1 lower level liberal studies course and SWP 331
- Transfer credits are granted for SWP 36A/B (based on prior education and experience - students are entering the program with at least a minimum of two field placements in their college program). SWP 331 and one liberal studies course replaces SWP 36A/B.

Advantages of this model:

- It provides a desperately needed pathway from college to university for graduates coming straight from the college system (i.e. without paid work experience). This is the group that is almost completely shut out in terms of access to BSW education in the status quo model (except to enter the four-year BSW at year one like any other student coming straight from high school).
- It exempts the students from the third year field placement courses which they do not need, given their previous College curriculum.
- It ensures this cohort will have the knowledge covered in SWP 331, which is a foundational course in year one of the BSW curriculum.

5. IMPLEMENTATION

Implementation of the new admissions models would occur for the next intake of Advanced Standing students, effective September 2014.

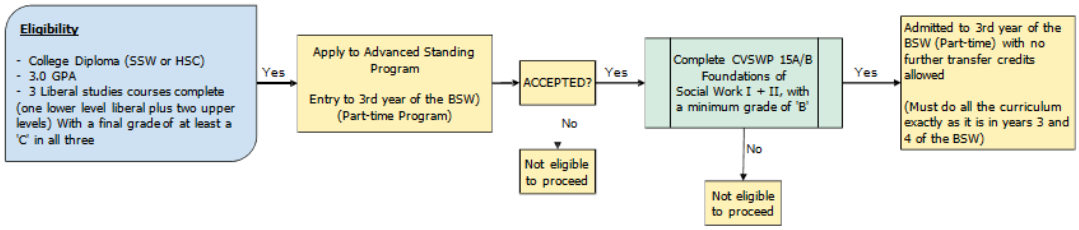
6. FLOWCHARTS FOR THE PROPOSED CHANGES

1. Current Model

Pathways to Advanced Standing for College Graduates*

* of SSW (Social Service Worker) & HSC (Human Services Counselor) programs

1. CURRENT MODEL



ISSUES

1. Although paid work experience is not officially required, because the program is so competitive, students without at least 2 years of paid experience almost never get in. However, on the promise/ hope of being admitted, College graduates (SSW and HSC) are paying for and completing 3 liberal studies courses. The current stated submissions requirements do not match the current actual practice. This is unfair.

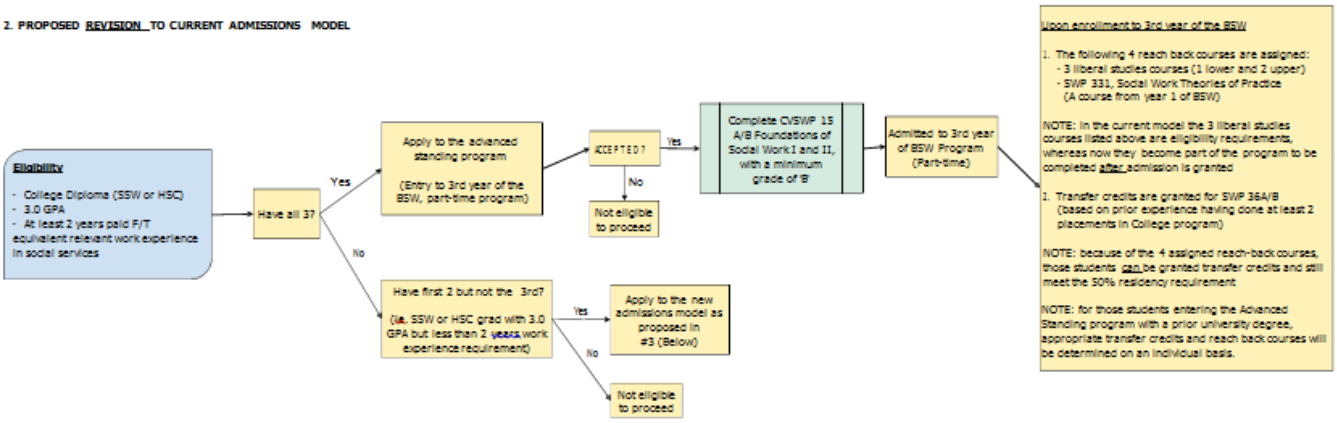
2. Field placements: these students do not need 2 more field placements (they've already done a minimum of 2 in the SSW or HSC program). Instead, they would benefit from more course work. However, because of the 50% residency requirement, they are not allowed transfer credits nor can they challenge SWP 36 A/B.

2. Proposed Revision to Current Admissions Model

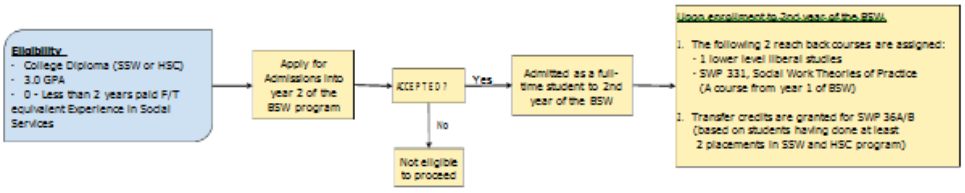
Pathways to Advanced Standing for College Graduates*

* of SSW (Social Service Worker) & HSC (Human Services Counselor) programs

2. PROPOSED REVISION TO CURRENT ADMISSIONS MODEL



3. Proposed NEW Admissions Model (Admission to Year 2 of the Full-time BSW program)



Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Admission Requirement Modifications for the Bachelor of Social Work degree program.*

E. FILM STUDIES CURRICULUM MODIFICATION IN THE SCHOOL OF IMAGE ARTS

1. OVERVIEW

The aim of the Film Studies curriculum modification is to develop a more carefully calibrated curriculum that builds a ladder of learning throughout the four years of the Bachelor of Fine Arts (BFA) degree program in Image Arts (Film Studies).

The Film Studies curriculum modifications will provide students with improved practical and theoretical skills at critical stages in their development. These changes respond to issues identified by external examiners, students and faculty in the recent Periodic Program Review. In particular, these additions and modifications will help develop deeper critical thinking and writing skills and eliminate some redundancies in production courses. All courses will be three hours, totaling 15 hours per semester with the exception of the Senior Thesis Project (MPF 42AB), which is a 6-hour course. Throughout the first three years of the Film Studies program the technology courses have been streamlined to respond to student feedback about repetition and to make the course delivery more hands-on.

The Film Studies curriculum modifications are scheduled to begin in Fall 2014 for first year students.

2. FILM STUDIES CURRICULUM MODIFICATIONS

FIRST YEAR

- Remove the first semester of Tools and Applications I (MPF 107) and replace it with the new course Introduction to Film Studies (MPF 290). This new film course will draw students' attention to issues of representation, media literacy and the basic principles of film analysis. This would introduce students to the discipline in their first year, as well as allow for more critical thinking and analytical writing at the start of their academic path, a long-desired pedagogical goal.
- Switch semesters - move Concepts and Theories MPC 201 to the winter semester and Visual Studies I MPC 101 to the fall semester. This makes better pedagogical sense: introducing key visual concepts in the first semester, and complementing the historical/theoretical courses Art and the Classical Tradition (MPC 103), Art in the Modern World (MPC 203), Introduction to Film Studies (MPF290) and Concepts and Theories (MPC 201) during the first year.
- Basic technical introduction to film production (camera, light metering, basic lighting and analog film editing) will be covered in the first semester of the Film Production (MPF 106) course.
- The second semester Tools and Applications II (MPF207) will be a revised version of the current Tools and Applications I (MPF107) and will cover non-linear editing, more advanced lighting, sound recording and sound editing.

First Year Original		**First Year Revised**	
FALL		**FALL**	
Film Production: Silent Film	MPF106	Film Production: Silent Film	MPF106
Tools & Applications I	MPF107	Introduction to Film Studies	MPF290
Art and the Classical Tradition	MPC103	Art and the Classical Tradition	MPC103
Concepts and Theories	MPC201	Visual Studies I	MPC101
Liberal Studies		Liberal Studies	
WINTER		**WINTER**	
Film Production: Sound Film	MPF206	Film Production: Sound Film	MPF206
Tools and Applications II	MPF207	Concepts and Theories	MPC201
Art in the Modern World	MPC203	Art in the Modern World	MPC203
Visual Studies I	MPC101	Tools and Applications I	MPF107
Liberal studies		Liberal Studies	

SECOND YEAR

- Remove Film Technology (MPF323) from the Fall semester. An advanced course, Film Tools and Applications II MPF 207 (revised) would address some of the growing complexities of the post-production process, specifically editing, special effects, and workflow.
- Retain Writing for Film I (Fiction) MPF 324 in the core, but remove Writing for Film II (formerly the documentary segment of the course) MPF 424 from the core. The key elements (research, proposals) will be folded into the Film Production (Documentary) MPF 422 course.
- Replace the technology and the documentary writing courses just noted with two electives– one each of Professional and Professionally related electives.

Second Year Original		**Second Year Revised**	
FALL		**FALL**	
Film Production	MPF322	Film Production	MPF322
Writing for Film I	MPF324	Writing for Film I	MPF324
Film History/Crit. to 1945	MPF327	Film History & Crit. to 1945	MPF327
Visual Studies II	MPC125	Visual Studies II	MPC125
Film Technology	MPF323	PE or PR Elective	
WINTER		**WINTER**	
Film Production	MPF422	Film Production	MPF422
Film Technology	MPF423	Tools & Applications II	MPF207
Film History/Crit. since 1945	MPF427	Film History & Crit. Since 1945	MPF427
Visual Studies III	MPC225	Visual Studies III	MPC225
Writing for Film II	MPF424	PE or PR Elective	

THIRD YEAR

- Reduce the Film Production courses (MPF 502, MPF 602) to 3 hours from 4 per term. To accomplish this goal, the overall number of productions has been lowered. Scheduled group meeting times have been repurposed to monitor productions on set.
- Business of Film (MPF 301) has moved to fourth year where students need it pre-graduation.
- One additional course, Film Technology MPF 300 will be revised as Technology I: Multi-Media (MPF300). The second course will be Technology II: Post-Production (MPFXXX). This allows for greater depth and breadth in core film production skills such as editing.

Third Year Original		**Third Year Revised**	
FALL		**FALL**	
Film Production	MPF502	Film Production	MPF502
Film Theory I	MPF505	Film Theory I	MPF505
Film Technology	MPF300	Film Technology I: Multi-Media Film	MPF300
PR/PE Elective		PE or PR Elective	
Liberal Studies		Liberal Studies	
WINTER		**WINTER**	
Film Production	MPF602	Film Production	MPF602
Film Theory II	MPF605	Film Theory II	MPF605
Business of Film	MPF301	Technology II: Post-Production	MPFXXX
PR/PE Elective		PE or PR Elective	
Liberal Studies		Liberal Studies	

FOURTH YEAR

- Drop one elective. This would still give students the current University-mandated requirement of three professional and three professionally related electives.
- Business of Film (MPF 301) would be offered in the fourth year, as indicated above.
- Introduce a new course, a Capstone Seminar/Lecture (MPFXXX) to focus on a specific theme of the aesthetic and ethical choices facing a practicing filmmaker.

Fourth Year Original		**Fourth Year Revised**	
FALL		**FALL**	
Film Production: Thesis	MPF42A/B	Film Production: Thesis	MPF42A/B
PE or PR Elective		Business of Film	MPF301
PE or PR Elective		PR or PE Elective	
Liberal Studies		Liberal Studies	
WINTER		**WINTER**	
Film Production: Thesis	MPF42A/B	Film Production: Thesis	MPF42A/B
PE or PR Elective		Capstone Lecture	MPFXXX
PE or PR Elective		PE or PR Elective	
Liberal Studies		Liberal Studies	

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Curriculum Modifications to the Bachelor of Fine Arts (Film Studies) degree program in the School of Image Arts.*

F. PHOTOGRAPHY STUDIES CURRICULUM MODIFICATION IN THE SCHOOL OF IMAGE ARTS

1. OVERVIEW

The aim of the Photography Studies curriculum modification is to develop a more carefully calibrated curriculum that builds a ladder of learning throughout the four years of the BFA (Image Arts) Photography Studies degree program.

The Photography Studies curriculum modifications respond to issues identified by external examiners, students and faculty in the recent Periodic Program Review. In particular, these additions and modifications will help develop deeper critical thinking and writing skills and eliminate some redundancies in production courses. All courses will be three hours, totaling 15 hours per semester with the exception of the Senior Thesis Project (MPF 42AB), which is a 6-hour course that includes a capstone lecture series.

The Photography Studies curriculum modifications are scheduled to begin in Fall 2014 for first year students.

2. PHOTOGRAPHY STUDIES CURRICULUM MODIFICATIONS

FIRST YEAR

- The first year of Photography Studies remains unchanged.

First Year	
FALL	
Photography Production	MPS106

Photography and Digital Imaging	MPS107
Art and the Classical Tradition	MPC103
Concepts and Theories	MPC201
Liberal Studies	
WINTER	
Photography Production	MPS206
Photography and the Web	MPS207
Art in the Modern World	MPC203
Visual Studies I	MPC101
Liberal Studies	

SECOND YEAR

- Introduction of one professional and one professionally related elective (PR and PE) to provide students with more choice earlier in their curricular path.
- The course Idea of Photography (MPS 306) is moved to the second term and replaces History of Photography II (MPS 401).
- The upper level history and theory courses, History of Photography II (MPS 401) and the Visual Culture of Photography (MPS 406) are repositioned to third year.
- A greater emphasis on research and critical writing has been placed integrated into History of Photography I (MPS 301) and The Idea of Photography (MPS 306).

Second Year Original		**Second Year Revised**	
FALL		**FALL**	
Photography Production	MPS308	Photography Production	MPS308
History of Photography I	MPS301	History of Photography I	MPS301
The Photographic Print	MPS307	The Photographic Print	MPS307
Visual Studies II	MPC125	Visual Studies II	MPC125
The Idea of Photography	MPS306	PE or PR Elective	
WINTER		**WINTER**	
Photography Production	MPS408	Photography Production	MPS408
History of Photography II	MPS401	The Idea of Photography	MPS306
The Photographic Studio	MPS407	The Photographic Studio	MPS407
Visual Studies III	MPC225	Visual Studies III	MPC225
The Visual Culture of Photography	MPS406	PE or PR Elective	

THIRD YEAR

- With the History of Photography II (MPS 401) and the Visual Culture of Photography (MPS 406) now in third year, greater emphasis can be placed on the historiography and critical analysis of photography appropriate to this level. This revised course delivery schedule allows greater connections to be forged between the applied projects and the history and theory of photography.
- Replacing Concepts and Theories I and II (MPS508,608) with the courses above ensures the depth of photography-specific content.

Third Year Original		**Third Year Revised**	
FALL		**FALL**	
Photography Production	MPS506	Photography Production	MPS506
The Photographic Book	MPS507	The Photographic Book	MPS507
Concepts and Theories I	MPS508	History of Photography II	MPS401

PE or PR Elective		PE or PR Elective	
Liberal Studies		Liberal Studies	
WINTER		**WINTER**	
Photography Production	MPS606	Photography Production	MPS606
The Expanded Image	MPS607	The Expanded Image	MPS607
Concepts and Theories II	MPS608	The Visual Culture of Photography	MPS406
PE or PR Elective		PE or PR Elective	
Liberal Studies		Liberal Studies	

FOURTH YEAR

- The overarching goal of the changes in second and third year is to better prepare students for the self-directed fourth year thesis projects in photography and related media.
- Previously, students took four PR and PE courses in fourth year. This number is now reduced to two PE/PR, which permits students to specialize in the skills and ideas they wish to pursue to support the thesis projects.
- New courses - MPS XXX: Topics in Photography and MPS XXX: Contemporary Practices

Fourth Year Original		**Fourth Year Revised**	
FALL		**FALL**	
Photography Production	MPS42A/B	Photography Production	MPS421/B
PE or PR Elective		Topics in Photography	MPSXXX
PE or PR Elective		PE or PR Elective	
Liberal Studies		Liberal Studies	
WINTER		**WINTER**	
Photography Production	MPS42A/B	Photography Production	MPS42A/B
PE or PR Elective		Contemporary Practices	MPSXXX
PE or PR Elective		PE or PR Elective	
Liberal Studies		Liberal Studies	

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Curriculum Modifications to the Bachelor of Fine Arts (Photography Studies) degree program in the School of Image Arts.*

G. OPTIONAL SPECIALIZATION IN ENGINEERING INNOVATION AND ENTREPRENEURSHIP

I. OVERVIEW

The Optional Specialization in Engineering Innovation and Entrepreneurship (OS EIE) proposal leverages the design principles inherent in engineering to build students' innovation and entrepreneurial capacity. The OS EIE is one part of a coordinated university-wide strategy to respond to the increasing demand from students who want to consider entrepreneurship as a career option.

The Optional Specialization in Engineering Innovation and Entrepreneurship has been developed to appeal to undergraduate engineering students with sharp minds and a passion for entrepreneurship – students who want to seize the opportunity to start their own company and/or work at a company where entrepreneurship is valued while earning their undergraduate engineering degree. The OS EIE will attract students who are passionate about discovering and exploiting new market opportunities. Prospective OS EIE students are oriented toward commercializing research and introducing innovation and disruptive technology into the business world. Many of our graduates are oriented to careers in independent businesses and industry rather than in academia.

The aim of the OS EIE is not so much to "teach entrepreneurship", but rather to make it possible for students to walk the path that entrepreneurs normally travel and learn that entrepreneurship itself is not a random process. Successful entrepreneurs follow a disciplined methodology to achieve results. Similarly, to innovate, students must learn the foundational stages of innovation from conception to collaboration to creation. The OS EIE will provide students with both the theory and practical hands-on experience of the process involved in taking an idea from concept to market.

The OS EIE consists of two elements: (i) 3 x 13-week lecture-based courses covering the Principles of Engineering Economics, Entrepreneurship and Innovation Management and Technology based New Venture Creation, and (ii) 3 x 13-week practicum (experiential) suite of courses. The three experiential learning courses mirror the well-known three-stage technology commercialization phase-gate process described in the literature.[1] The process involves: Business Concept Identification – customer's discovery stage, Market & Technology Development – customer's validation stage, and Business Development & Market Readiness – customer's creation stage.
The OS EIE will enhance engineering students' competency and confidence to identify real world needs and create responsive technological solutions, to take calculated risks, collaborate and communicate in ways that attract mentorship, partnership and investment. Ultimately, the OS EIE will equip engineering students with a sound understanding of the full life-cycle of technology ventures so that they are prepared to launch and sustain successful Canadian companies.

The OS EIE creates a link between Ryerson's successful models of student-driven innovation, as demonstrated by Ryerson's Digital Media Zone, and our accredited engineering curricula. While the OS EIE is aligned with Ryerson's Zone Education Model and is used as a case study of how the umbrella course model might be deployed, the OS is in fact independent of, and does not rely upon, the umbrella course.[2]

Much like the current Optional Specialization in Management Science offered to students in the Faculty of Engineering and Architectural Science and the Faculty of Science, optional specialization students will take the curriculum as an extension to their regular degree program. The designation "Optional Specialization in Engineering Innovation and Entrepreneurship" would appear on the student's academic transcript upon successful completion of the Optional Specialization.

Awareness of concepts in entrepreneurship and innovation are valuable skills for any student entering the work force. While many engineers go on to pursue an MBA following their engineering undergraduate degree, that path is not academically and/or financially realistic for all students. For those who will not pursue graduate studies, the OS EIE provides a realistic industry-centered experience that enhances competency beyond academic studies without unduly extending completion time or requiring graduates to commit to postgraduate programs. Moreover, because of the real-time business development experience and the mentorship opportunities it affords, the OS EIE positions students to enter a competitive job market with the skills, capacities, and sensibilities that many of today's employers are seeking already in place.

Start-up of the Optional Specialization in Engineering Innovation and Entrepreneurship is scheduled for May 2014.

2. LEARNING OUTCOMES OF THE OPTIONAL SPECIALIZATION

The Optional Specialization in Engineering Innovation and Entrepreneurship will allow students to:

- gain a solid foundation of innovation and entrepreneurship theory as well as the immersive experience of advancing and shaping their own ideas into a business;

[1] "Managing Innovation at Xerox" by R.O. Loutfy and L. Belkhir, Research Technology Management Journal, Vol.44, No 4, pp. 15-24, Jul/Aug 2001.

[3] Report of Academic Standards Committee. #W2013-5; June 2013 "Optional Specialization in Zone Education" - page 63 of the Senate document.

- develop a competency in needs assessments and market research so that they are prepared to analyze the competitive landscape and hone in on suitable target markets;
- develop greater financial literacy with respect to technology venture financing including cost analysis, cash flow management and inflation impacts;
- understand the structure, content and style of a business plan;
- learn to create business, marketing and technology development plans that reflect the lifecycle of the company growth (from early adopters to sustaining consumers);
- acquire a functional understanding of the basic tenets of intellectual property, risk management and the regulatory and approval processes inherent in the technology field;
- understand the costs and pacing required to remain competitive in the pre-commercialization stage;
- learn about the role of engineering innovation and entrepreneurship in Canadian society;
- be inspired by their peers, faculty and professional guest lecturers; and
- develop the self-confidence required to take risks, pursue their ideas and build strong teams.

3. ADMISSIONS REQUIREMENTS AND ENROLLMENT TARGETS

Admission to the OS EIE will be restricted to FEAS undergraduate engineering students who have completed the first year or higher of their undergraduate degree program with CLEAR academic standing. Students must successfully complete all six courses within the OS EIE with a minimum CGPA of 1.67 (and achieve a minimum CGPA of 1.67 for all courses required for their program simultaneously) before graduation to earn this special designation on their transcripts. While students will be encouraged to work in teams, they will apply as individual students.

Applicants will also be expected to present a proposal outlining their ideas relevant to their pursuit of the OS EIE. The admissions committee will screen applicants for the viability of business ideas. Applicants must submit official transcripts from all post-secondary institutions. Other non-academic criteria may be required, such as letters of reference. Program-specific background information, such as a resume and a covering letter, are also required.

The target enrollment for the OS EIE is approximately 70-80 undergraduate engineering students in the first year and approximately 200 students by the third year (steady state of enrollment). This is a reasonable portion of the approximately 3,600 undergraduate engineering students enrolled in 2012/13. The goal is to enable students to start the program by May 2014.

4. CURRICULUM

Students enrolled in the Optional Specialization in Engineering Innovation and Entrepreneurship are required to complete the following six courses:

ECN 801	Engineering Economics
EMS 201	Entrepreneurship and Innovation Management
EIE 201	Start-up of Technology Ventures (new)
EIE 301 Practicum I	New Venture Identification – Customer Discovery (new)
EIE 401 Practicum II	Market & Technology Development - Customer Validation (new)
EIE 501 Practicum III	Business Development & Market Readiness (new)

ECN 801 is offered as part of regular undergraduate engineering programs.
EMS 201 and EIE 201 will be offered in the Spring/Summer term each year.
EIE 301, EIE 401, and EIE 501 will be offered three times in the Fall, Winter, and Spring/Summer terms each year.

5. INDIVIDUAL COURSE LEARNING OBJECTIVES

ECN801:

- Understanding of the principles of venture financing
- Ability to complete a cost analysis
- Understanding of cash flow management
- Comprehension of inflation impacts

EMS 201:

- Understanding of the entrepreneurial process and how to manage it
- Ability to chart and apply the innovation process to problem solving
- Demonstration of the ability to create scenarios and settings to heighten the ideation process and improve results

EIE 201

- Understand the entrepreneurial process
- Practice team formation and team building
- Brainstorm and group creativity in generation of business ideas
- Evaluation and selection of viable business ideas
- Development of a unique value proposition
- Assessing market feasibility
- Assessing technical feasibility
- Constructing a preliminary financial feasibility and assessment
- Selection a business model and make strategic commercialization path choices
- Generating a commercialization feasibility report
- Business plan pitch to a potential investor

EIE 301

At the end of this practicum, the successful student will be able to:

- Articulate what is the customer's problem they are trying to solve or the market gap that they are trying to fill.
- Explain what the proposed technical/engineering solution is and what their unique selling point is.
- Explain what the technical solution will look like, what are the benefits to customers and what are the main features and attributes of the solution
- Using secondary market research, identify the different customer groups that can potentially benefit from the proposed solution and how they make their purchase decisions, estimate what is the market size, how can you reach your customer, and what are the most common business models in your targeted industry.
- Identify the competition for the proposed solution, what companies? What technologies?
- Present a clear technology development plan. A clear approach should be presented to demonstrating that the core technology can provide the "essence" of the proposed solution. The planning of the required activities should identify all of the resources needed to carry out the proof of concept activities.
- Carry out a detailed intellectual property analysis. Identify the novelty associated with the idea/technology and how might it be protected. Identify any intellectual property that might prevent the offering of this solution to the customer. Identify the approach to acquiring access to any intellectual property that will be required to bring the solution to the customer.

EIE 401

At the end of this practicum, the successful student will be able to:

- Conduct a customer validation study using comprehensive primary market research to identify:

- The targeted customer groups,
- The value proposition to the different customer groups,
- The market size for the product and/or service using both, a top-down and a bottom-up approach to market sizing,
- The competitive situation with a detailed analysis of competitive technologies and of the organizations that provide competitive products/services.
- The cost and price of the product and/or service,
- The potential revenue and net profit

- Evaluate and demonstrate various engineering proof-of-concept solution
  - Select the minimum technology set that can deliver a solution that meet voice of the customer,
  - Demonstrate the minimum product and/or service to lead customer(s),
  - Determine the novelty, utility and non-obviousness of the technology and establish intellectual property position.
  - Identify the resources (skills, time, and cost) needed to carry out full development of the product.
  - Explore various sources of capital (funding)

EIE 501

At the end of this practicum, the successful student will be able to:

- Develop and evaluate various business strategies and chose viable strategy that maximize their sustain competitive advantage
- Develop a comprehensive business plan and pitch for investors
- Develop a go-to-market operating and marketing plan for their venture
- Identify specific lead users, partners and alliances.
- Describe how they will sell to their first customer
- Revisit the competitive analysis
- Conduct market readiness reviews

Detailed course descriptions and course outlines can be found in the full proposal.

6. APPROVALS

The Optional Specialization received approval in principal from the Faculty-wide Development Committee and the Chairs' Council of the Faculty of Engineering and Architectural Science in winter 2013. The OS EIE received formal approval from the Faculty-wide Development Committee on Engineering Innovation and Entrepreneurship in September 2013. The OS EIE received unanimous formal approval from FEAS Chairs Council in September 2013. FEAS has eight engineering programs which are represented by five Departmental Councils. The OS EIE received unanimous approval all the Engineering Departmental Councils.

7. ACADEMIC GOVERNANCE AND COURSE MANAGEMENT

The Optional Specialization in Engineering Innovation and Entrepreneurship will have its academic home in the Dean's Office, Faculty of Engineering and Architectural Science. A Faculty-wide program committee with representation from each Engineering Department will be established for the OS EIE and a Program Director will be appointed. The Dean of Engineering and Architectural Science will have responsibility for teaching assignments as negotiated with individual faculty and their Chairs. Instruction for courses will be carried out by Ryerson faculty and sector experts engaged as CUPE instructors. A similar structure has been used successfully for over 8 years in the case of the Optional Specialization in Management Science.

In terms of university-level engagement, the Director of Zone Learning will participate in program-level planning and discussions. The Centre for Engineering Innovation and Entrepreneurship (CEIE) will coordinate effort in engaging external and internal business and technical mentors. All of the OS EIE courses are subject to respective Senate policies, including Policy 145 Course Management Policy and Policy 134 Undergraduate

Academic Consideration and Appeals. The Program Director of OS EIE will handle first level grade and standing appeals.

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Optional Specialization in Engineering Innovation and Entrepreneurship.*

H. ADMISSIONS CHANGES IN HEALTH SERVICES MANAGEMENT AND HEALTH INFORMATION MANAGEMENT

1. BACKGROUND

The Bachelor of Health Administration (Health Services Management), HSM, part-time degree completion program is designed to allow health practitioners to upgrade their education to the level of an undergraduate degree in the theory and management of health services. Admissions to the HSM program follow one of two entrance points into the program, labeled Stream A or Stream B. Applicants to either Stream A or B must exhibit current professional experience in the healthcare field. The Bachelor of Health Administration (Health Information Management), HIM, part-time degree completion program is designed to allow health practitioners to upgrade their education to the level of an undergraduate degree in theory and management of health information. Admission requirements for HIM are very similar to those for HSM

2. PROPOSED REVISIONS

a. To modify the Stream B admission requirements for applicants to the part-time degree completion Bachelor of Health Administration (Health Services Management), HSM, program and the Bachelor of Health Administration (Health Information Management), HIM, program. Specifically, HSM proposes that Stream B applicants, currently defined as degree-holding, should also include those who have completed at least 2 complete years of university study in a health related field.

b. To clarify that the two years of required health-related work experience be judged cumulatively, not continuously.

3. RATIONALE FOR PROPOSED CHANGES

When the HSM part-time degree completion model was first introduced, the majority of applicants were mature students already working in their chosen discipline, who had achieved a 3-year diploma in applied health from a program accredited by the Colleges of Applied Arts and Technology (CAAT). Currently:

- Stream A applicants to HSM require a 3-year diploma, then complete 22 courses in the HSM degree completion program.
- Stream A applicants to HIM require a 2-year diploma and CHIMA certificate, then complete 24 courses in the HIM degree completion program.

Recent years have shown an increase in HSM and HIM Stream B applicants, i.e., those with a completed previous undergraduate degree or many degree credits. The School of Health Services Management is proposing that Stream B applicants must have completed at least two years undergraduate study in a health-related field or hold a degree in another field, from an accredited university. (Two years undergraduate study is defined as 10 two-semester courses or 20 one-semester courses.) In either case they must have at least two years of current professional experience in the health services field. In proposing this change, the program is attempting to be consistent in the assessment of college and university courses: 2 years full time university credits (Stream B) should equal 3 years full time college credit (Stream A), as long as the former is in a health-related field.

The proposed changes will only be applicable to Stream B applicants. Stream A criteria remain unchanged with the exception of recognizing that the two year work experience may be cumulative.

4. HEALTH SERVICES MANAGEMENT CALENDAR COPY CURRENT AND PROPOSED

Current - Health Services Management	Proposed - Health Services Management (changes highlighted with underscore)
Admission Guidelines Candidates for admission to the Health Services Management degree-completion program are required to meet all of the following minimum requirements. The program in Health Services Management is intended for two separate, distinct applicant streams. The university welcomes and encourages applications from both of these groups as outlined below. Stream A: 1. Graduation from a three year diploma program in applied health science (e.g., nursing, medical laboratory technology, chiropody, radiology) from an Ontario College of Applied Arts and Technology (CAAT), or the equivalent, with a grade average of 'B' or higher. The diploma must include a one-year introductory, university level humanities course or the equivalent. 2. At least two years of current professional experience in the health services field. 3. Documentation of professional registration/certification where appropriate. NOTE: Students who wish to enrol in any Faculty of Arts course that has a prerequisite must first obtain permission from the appropriate teaching department. Students are required to provide the teaching department with a course outline and proof of completion of the appropriate prerequisite. Stream B: Candidates must be in possession of a bachelor's degree or higher in a field related to health sciences from an accredited university or a bachelor's degree, and at least two (2) years of current professional experience in the health services field. Applicants who have yet to finish their first degree, may be eligible for conditional acceptance contingent on their completing their degree requirements prior to the commencement of classes. **Admission Procedures** Applicants must submit the following, in addition to the online application and Supplementary Form, to Undergraduate Admissions and Recruitment: 1. Officially certified academic transcripts including promotion/graduation status of all post-secondary studies (including studies in an applied health science program). High school transcripts are not required. 2. A detailed and separate resume of previous work experience, academic experience (including continuing education), and professional activities. 3. Documentation of professional registration/certification,	**Admission Guidelines** Candidates for admission to the Health Services Management degree-completion program are required to meet all of the following minimum requirements. The program in Health Services Management is intended for two separate, distinct applicant streams. The university welcomes and encourages applications from both of these groups as outlined below. Stream A: 1. Graduation from a three year diploma program in applied health science (e.g., nursing, medical laboratory technology, chiropody, radiology) from an Ontario College of Applied Arts and Technology (CAAT), or the equivalent, with a grade average of 'B' or higher. The diploma must include a one-year introductory, university level humanities course or the equivalent. 2. At least two years of <u>cumulative</u>, current professional experience in the health services field. 3. Documentation of professional registration/certification where appropriate. NOTE: Students who wish to enrol in any Faculty of Arts course that has a prerequisite must first obtain permission from the appropriate teaching department. Students are required to provide the teaching department with a course outline and proof of completion of the appropriate prerequisite. Stream B: <u>Candidates must have completed, at an accredited university, at least two years undergraduate study in a health-related field or hold a degree in another field, from an accredited university. In either case they must have at least two years of cumulative, current professional experience in the health services field.</u> **Admission Procedures** Applicants must submit the following, in addition to the online application and Supplementary Form, to Undergraduate Admissions and Recruitment: 1. Officially certified academic transcripts including promotion/graduation status of all post-secondary studies (including studies in an applied health science program). High school transcripts are not required. 2. A detailed and separate resume of previous work experience, academic experience (including continuing education), and professional activities. 3. Documentation of professional registration/certification,

where applicable. Each applicant will be reviewed by a department admissions committee to ensure academic and practice suitability for the program. Students are admitted three times a year, in the Fall, Winter, and Spring/Summer semesters.	where applicable. Each applicant will be reviewed by a department admissions committee to ensure academic and practice suitability for the program. Students are admitted three times a year, in the Fall, Winter, and Spring/Summer semesters.

5. HEALTH INFORMATION MANAGEMENT CALENDAR COPY CURRENT AND PROPOSED

Current - Health Information Management	**Proposed - Health Information Management (highlighted)**
ADMISSION: Candidates for admission to the Health Information Management degree-completion program must meet all the following minimum requirements: This program in Health Information Management is intended for two separate, distinct applicant streams, and the university welcomes/encourages applications from both of these groups as outlined below. **Stream A:** For individuals who are graduates of health record/health information CHIMA-accredited or recognized programs, having at least two years related current professional experience in the field of health information management and a grade average of 'B' or higher. Documentation of professional registration/certification with the CHIMA is also required. Potential candidates with other post-secondary academic backgrounds and extensive professional experience in the field of health information management will be considered on an individual basis. **Stream B:** For individuals who are graduates from a three-year Advanced Diploma program with a grade average of 'B' or higher in applied health sciences (e.g. nursing, medical laboratory technology, chiropody, radiology, respiratory therapy) from an Ontario College of Applied Arts and Technology (CAAT), or the equivalent. The diploma must include a one-year introductory, university-level humanities course or equivalent. Candidates must have at least two years of current professional experience in the health services field as well as documentation of professional registration/certification where applicable. Potential students with other post-secondary academic backgrounds and extensive professional experience in the field of health information management will be considered on an individual basis.	**ADMISSION:** Candidates for admission to the Health Information Management degree-completion program must meet all the following minimum requirements: This program in Health Information Management is intended for two separate, distinct applicant streams, and the university welcomes/encourages applications from both of these groups as outlined below. **Stream A:** For individuals who are graduates of health record/health information CHIMA-accredited or recognized programs, having at least two years of <u>cumulative</u>, current professional experience in the field of health information management and a grade average of 'B' or higher. Documentation of professional registration/certification with the CHIMA is also required. Potential candidates with other post-secondary academic backgrounds and extensive professional experience in the field of health information management will be considered on an individual basis. **Stream B:** For individuals who are graduates from a three-year Advanced Diploma program with a grade average of 'B' or higher in applied health sciences (e.g. nursing, medical laboratory technology, chiropody, radiology, respiratory therapy) from an Ontario College of Applied Arts and Technology (CAAT), or the equivalent. The diploma must include a one-year introductory, university-level humanities course or equivalent. Candidates must have at least two years of cumulative, current professional experience in the health services field as well as documentation of professional registration/certification where applicable. Potential students with other post-secondary academic backgrounds and extensive professional experience in the field of health information management will be considered on an individual basis. <u>Candidates must have completed at least two years undergraduate study in a health-related field or hold a degree in another field, from an accredited</u>

	university. In either case they must have at least two years of cumulative, current professional experience in the health information field.
NOTE: Given that this is a degree-completion program in Health Information Management, the curriculum dovetails and aligns with the current learning outcomes for CHIMA recognized health information management practitioner programs.	NOTE: Given that this is a degree-completion program in Health Information Management, the curriculum dovetails and aligns with the current learning outcomes for CHIMA recognized health information management practitioner programs.
Admission Procedures In addition to the online application and Supplementary Form, applicants must submit the following to Undergraduate Admissions and Recruitment at Ryerson: 1. Officially certified academic transcripts including promotion/graduation status of all post-secondary studies (including studies in an applied health science program). High school transcripts are not required. 2. A detailed and separate resume of previous work experience, academic experience (including continuing education), and professional activities. 3. Documentation of professional registration/certification, where applicable. Each applicant will be reviewed by the department admissions committee to ensure academic and practice suitability for the program. Students are admitted three times a year, in the Fall, Winter and Spring/Summer semesters.	**Admission Procedures** In addition to the online application and Supplementary Form, applicants must submit the following to Undergraduate Admissions and Recruitment at Ryerson: 1. Officially certified academic transcripts including promotion/graduation status of all post-secondary studies (including studies in an applied health science program). High school transcripts are not required. 2. A detailed and separate resume of previous work experience, academic experience (including continuing education), and professional activities. 3. Documentation of professional registration/certification, where applicable. Each applicant will be reviewed by the department admissions committee to ensure academic and practice suitability for the program. Students are admitted three times a year, in the Fall, Winter and Spring/Summer semesters.

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Admissions Changes in Health Services Management and Health Information Management degree programs.*

I. NAME CHANGE OF DEPARTMENT AND PROGRAM – DEPARTMENT OF CRIMINAL JUSTICE AND CRIMINOLOGY

The Department of Criminal Justice and Criminology has evolved in research scholarship and teaching since 2007 with the hiring of six tenure track faculty members with PhDs in disciplines such as women's studies, social anthropology, law and criminology. The program name 'Criminal Justice' and the department name 'Criminal Justice and Criminology' no longer reflect the interdisciplinarity nor the broader focus of faculty research in teaching within the department. Therefore it is proposed that the program name be changed to *Criminology* and the department name be changed to *Department of Criminology.* Students would graduate with a Bachelor of Arts in Criminology.

The revised name better reflects the scholarly field of study. Criminology is an interdisciplinary field of study which encompasses analysis of the institutions and processes associated with defining and responding to crime and criminality. This includes an understanding of the role of government policy, social institutions and other methods of social and legal regulation of individuals. Criminal Justice is one element of this field.

There is confusion among current and prospective students about whether or not the program is similar in academic rigour to other programs in Criminology (see Table 1). Among the six programs listed, Ryerson and Guelph are the only programs that do not have the term 'Criminology' in the program name. The name change will ensure that there is no confusion, among students, about the breadth and depth of scholarship in the program. The change would also create consistency between the department name and program name.

Table 1

Educational Institution	Name and/or Description of Program
University of Ontario – Institute of Technology (UOIT)	Criminology and Justice
University of Toronto	Criminology
York University	Criminology
Wilfrid Laurier University	Criminology
University of Guelph	Criminal Justice and Public Policy
Ryerson	Criminal Justice

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve that the program name of the Bachelor of Arts (Criminal Justice) be changed to the Bachelor of Arts (Criminology), and that the department name be changed from the Department of Criminal Justice and Criminology to the Department of Criminology.*

J. PROPOSAL FOR MODIFICATIONS TO THE CIVIL ENGINEERING CURRICULUM

1. RATIONALE AND PROPOSED CHANGES

The Department of Civil Engineering proposes a redesign of the undergraduate degree program in order to position the Civil Engineering at Ryerson to continue to grow and to offer competitive civil engineering education. This is an outcome of the recent Civil Engineering Review for accreditation. The proposed changes will provide graduates with the knowledge and skills to enter the civil engineering profession. Graduates from the Civil Engineering program would expect to be employed by engineering technology and consulting companies, the construction industry, the mining industry, and municipality and government agencies.

The proposed Civil Engineering program curriculum focuses mainly on four areas: environmental, geomatics, structural/materials and transportation engineering. The curriculum of the proposed Structural Engineering option provides further focus on structural analysis, computer-aided structural analysis, structural building systems, structural design of concrete, steel, timber and masonry, bridge design and construction, and renovation/repair of existing structures.

The major changes in the Civil Engineering curriculum (Figure 1) are based on the current and future needs in resources as well as student needs. Due to low enrollment levels in the Transportation and Environmental Engineering streams and the Geomatics Engineering option, these three areas have been integrated into a common Civil Engineering program which includes structural/materials engineering courses to ensure that Civil Engineering graduates also have an appropriate background in structural engineering. The major changes proposed are:

- Students after the second year may choose to continue in the regular Civil Engineering program or join the two-year Structural Engineering option.
- There will be a 60% cap for enrolment in either the Civil Engineering program or the Structural Engineering option. Selection to continue in the Civil Engineering program or enter the Structural Engineering option after the second year will be made on a competitive basis, subject to program capacity.

- The Civil Engineering Program and the Structural Engineering option will have common third and fourth semesters.
- Students in the Civil Engineering program will have the opportunity to specialize in one of the civil engineering disciplines by selecting either the Environmental Engineering stream or the Transportation Engineering stream in the fourth year.

The Environmental Engineering stream, the Transportation Engineering stream and the Structural Engineering option are also intended to provide students with a stronger foundation for those who wish to pursue graduate studies in these fields.

Figure 1. Proposed Civil Engineering program structure

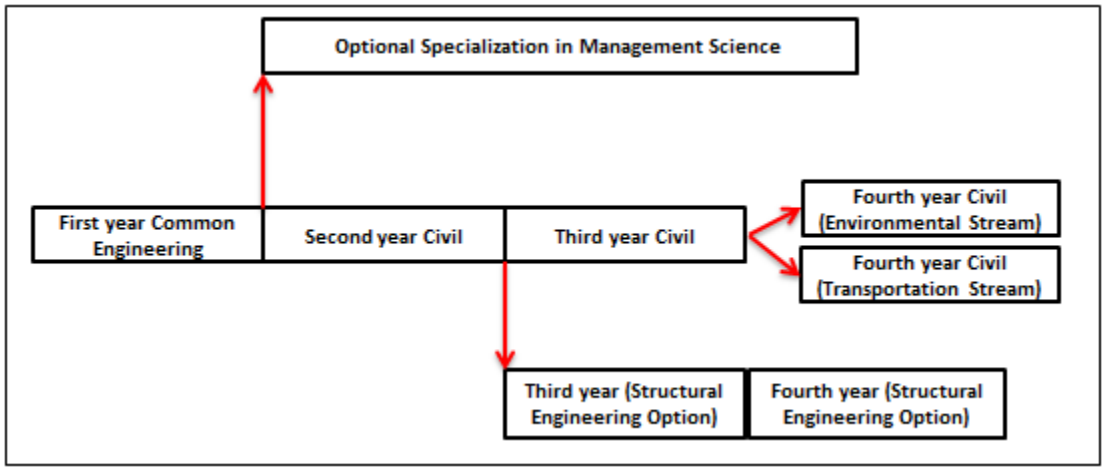


Table 1 summarizes enrollment in the existing Civil Engineering program and the Geomatics Engineering option. There has been a significant shift towards the Structural Engineering stream. There has also been an increased demand for capstone projects based on structural engineering projects compared to other areas. Fifty percent of faculty members teach structural related courses in the department. This critical mass in availability of Structural Engineering faculty members and increasing enrollment in Structural Engineering stream has led to the development of the proposed Structural Engineering option. In addition, there is an increasing demand in Greater Toronto Area and Canada at large to hire structural engineers in areas of special interest to Canada's economy including transportation and municipal infrastructures repair, design and maintaining energy production structures (i.e. nuclear plants, power generation companies, transmission towers, oil and gas industry, blast resistant structures…etc.).

Table 1: Summary of enrollment in the existing Civil Engineering program and Geomatics Engineering option

Year	Enrollment in the fourth year of the Civil Engineering program and the Geomatics option					
	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Structural Engineering stream	61	62	65	93	112	86
Transportation Engineering stream	6	15	22	14	20	21
Environmental Engineering stream	12	16	23	17	18	5
Geomatics Option	5	9	0	0	11	10

The small numbers of students interested in the Geomatics option make it difficult to sustain the current number of courses in this option. The proposed modifications are expected to address these two trends

2. LEARNING OUTCOMES

The following summarizes the desirable outcomes that graduates from the Civil Engineering program should be able to demonstrate:

- a strong foundation and knowledge in engineering fundamentals with a capacity to know how, when and where to use the knowledge in specific ways;
- an ability to identify, formulate, analyze and solve engineering problems with a capacity to integrate material from more than one subject and apply the appropriate engineering principles to arrive at correct and effective solutions to the problem;
- a comprehensive knowledge in the fundamentals of engineering practice including an ability to use analytical techniques, experimental and laboratory skills and modern engineering simulation and design software tools necessary for engineering practice, accompanied by principles and skills in engineering design, development and management in global cultural and business contexts;
- a broad multidisciplinary view with an ability to work effectively as members of teams (where appropriate) composed of individuals from different sub-disciplines, and different professional cultures;
- a strong oral and written communication skills with a capacity to produce effective technical documents and to use current communication techniques and tools;
- a culture of life-long learning with a capacity to engage in continuous self-improvement, personal enrichment and professional development; and
- A broad sense of social, ethical and professional responsibility with a capacity to demonstrate an understanding and appreciation of the human dimension of technology and its impact on mankind. This should include an understanding of the historical and societal perspectives of the impact of technology in a global context, including an understanding of global issues, sustainable development, environmental issues and protection, and cultural diversity.

3. CURRICULUM MODIFICATIONS

- The first and second semesters will remain the same as the existing program and will be offered to all Civil Engineering students.
- The regular Civil Engineering program and the Structural Engineering option will have common third and fourth semesters.
- A new course CVL300 Environmental Impact Assessment will be introduced in the third semester
- The Environmental Engineering field will be covered through seven courses after integrating MEC 522: Fluid Mechanics course with other Environmental Engineering courses to have a stronger civil engineering component. These courses are CVL300 Environmental Science and Impact Assessment, CVL400 Hydrology and Water Resources, CVL501 Fluid Mechanics and Hydraulics, CVL601 Wastewater Engineering, CVL903 Water Resources Engineering, CVL913 Water Supply Engineering and CVL901 Municipal Solid Waste Management.
- MEC522 Fluid Mechanics will be deleted and most of the topics in this course will be integrated in the proposed Environmental Engineering courses.
- The Transportation Engineering field will be covered through six courses starting from the fourth semester. These courses are CVL316 Transportation Engineering, CVL633 Highway Materials, CVL735 Highway Design, CVL910 Transportation Planning, CVL900 Pavement Design and Management and CVL902 Traffic Operations and Management.
- The new course CVL405 Probability and Statistics for Engineers that replaces MTH410 Statistics incorporates the course contents of one of the courses eliminated Geopatics option (i.e. Data Modelling and Analysis). The new CVL405 course will be geared towards civil engineering applications.
- In the proposed Civil Engineering program, there will be six structural related courses (CVL320 Strength of Materials I, CVL423 Geology for Engineers, CVL420 Strength of materials II and CVL533 Concrete Materials from the current program and a new course CVL500 Introduction to Structural Design. CVL500 will integrate CVL410 and CVL411 into one course that will focus mainly in simple beams and columns in

addition to design loads and loading cases and building codes well as timber design. The advanced part of this structural design (CVL410 Structural Concrete Design I and CVL411 Structural Steel Design) will be taught through the Structural Engineering Option for students specialized in structural Engineering. In addition, part of CVL313 Structural Analysis will be included in the CVL 320 and CVL420 so that students continuing in the Civil Engineering program will have background in basic structural analysis.

- EES 512 Electric Circuits will be deleted.
- To ensure that students joining the Structural Engineering option have a background in transportation engineering the course CVL 316 Transportation Engineering will be offered in the fourth semester which is common for all students. Also, to ensure that students joining Structural Engineering option have background in environmental engineering courses CVL300 Environmental Impact Assessment and CVL 400 Hydrology and Water Resources will be offered in the common second year. Students joining the Structural Engineering option will be exposed to surveying through CVL323 Fundamentals for Surveying that is offered in the common third semester.
- Students joining the Structural Engineering option will attend basic courses in structural engineering with students in the regular Civil Engineering program in the second year (CVL320, CVL423, CVL420 and CVL434) and CVL500 Introduction to Structural Design in the fifth semester. Specialized courses in Structural Engineering will be offered in the third and fourth year similar to those in the current program (CVL313, CVL600, CVL312, CVL410, CVL411, CVL904, CVL905, CVL906 AND CVL908). The two transportation courses CVL633 Highway Materials and CVL900 Pavement Design and Management will also be offered to the Structural Engineering option along with the regular Civil Engineering program to provide background in transportation infrastructure related to the structural engineering field. These specialized courses in the third and fourth year in bridge and building designs will make the Structural Engineering option unique in Canada.

4. COMPARISON BETWEEN THE CURRENT AND PROPOSED PROGRAM

	Current		**Proposed**	
	Civil Engineering	Geomatics Option	Civil Engineering	Structural Engineering option
Total Contact Hours	199	203	201	200
Lecture Hours	132	135	133	133
Lab/Tut Hours	67	68	68	67
Total # of courses including Liberal Studies	44	44	45	45

5. CREDENTIALS

- A student graduating from the Civil Engineering program will earn a Bachelor of Engineering (BEng) degree in Civil Engineering.
- A student graduating from the Structural Engineering option will earn a Bachelor of Engineering (BEng) in Civil Engineering with a Structural Engineering option.

6. COMPARISON BETWEEN THE CURRENT AND PROPOSED PROGRAM

CURRENT PROGRAM

Bachelor of Engineering (Civil Engineering)

FIRST SEMESTER

Common to Aerospace, Biomedical, Chemical, Civil, Computer, Electrical, Industrial and Mechanical Engineering Programs

Common to the Regular Program and the Geomatics Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:					
	COMMON ENGINEERING: Intro. to Eng.	CEN 100	1	2	1+
	COMMON ENGINEERING: Writing Skills	CEN 199	1	0	0
	CHEMISTRY: General Chemistry	CHY 102	1	3	1+
	MATHEMATICS: Calculus I	MTH 140	1	4	2
	MATHEMATICS: Linear Algebra	MTH 141	1	4	1
	PHYSICS: Physics: Mechanics	PCS 211	1	3	1/1+
LIBERAL STUDIES ELECTIVE GROUP A:					
One course required from Table A.			1	3	
				19	**7**

+ Tutorial

SECOND SEMESTER

Common to the Regular Program and the Geomatics Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:					
	COMPUTER SCIENCE: Digital Computation and Programming	CPS 125	1	3	2
	CIVIL: Graphics	CVL 207	1	2	2
	ECONOMICS: Principles of Engineering Economics	ECN 801	1	3	0
	MATHEMATICS: Calculus II	MTH 240	1	4	1
	MECHANICAL: Materials Science Fundamentals	MTL 200	1	3	1**
	PHYSICS: Physics: Waves and Fields	PCS 125	1	3	1/1+
				18	**8**

** Two hour lab every second week.

PROPOSED PROGRAM CHANGES FOR 2014/2015

Bachelor of Engineering (Civil Engineering)

FIRST SEMESTER

Common to Aerospace, Biomedical, Chemical, Civil, Computer, Electrical, Industrial and Mechanical Engineering Programs.

Common to the Regular Program and the Structural Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:					
	COMMON ENGINEERING: Intro. to Eng.	CEN 100	1	2	1+
	COMMON ENGINEERING: Writing Skills	CEN 199	1	0	0
	CHEMISTRY: General Chemistry	CHY 102	1	3	1+
	MATHEMATICS: Calculus I	MTH 140	1	4	2
	MATHEMATICS: Linear Algebra	MTH 141	1	4	1
	PHYSICS: Physics: Mechanics	PCS 211	1	3	1/1+
LIBERAL STUDIES ELECTIVE GROUP A:					
One course required from Table A.			1	3	
				19	**7**

+ Tutorial

SECOND SEMESTER

Common to the Regular Program and the Structural Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:					
	COMPUTER SCIENCE: Digital Computation and Programming	CPS 125	1	3	2
	CIVIL: Graphics	CVL 207	1	2	2
	ECONOMICS	ECN 801	1	3	0
	MATHEMATICS: Calculus II	MTH 240	1	4	1
	MECHANICAL: Materials Science Fundamentals	MTL 200	1	3	1**
	PHYSICS: Physics: Waves and Fields	PCS 125	1	3	1/1+
				18	**8**

** Two hour lab every second week.

CURRENT PROGRAM

Bachelor of Engineering (Civil Engineering)

THIRD SEMESTER

Common to the Regular Program and the Geomatics Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:					
	CIVIL: Strength of Materials I	CVL 320	1	4	2
	CIVIL: Fundamentals of Surveying	CVL 323	1	3	2
	CIVIL: Geology for Engineers	CVL 423	1	3	1†
	MECHANICAL: Fluid Mechanics	MEC 522	1	3	1**
	MATHEMATICS: Differential Equations and Vector Calculus	MTH 425	1	4	2
				17	**8**

** Two hour lab every second week.
† Tutorial

NOTE: All required core courses in 1st and 2nd semester are prerequisites to all required core courses in in 3rd semester.

FOURTH SEMESTER

Common to the Regular Program and the Geomatics Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:					
	CIVIL: Strength of Materials II	CVL 420	1	3	2
	CIVIL: Hydrology and Hydraulic Engineering	CVL 425	1	3	1/2†
	CIVIL: Geotechnical Properties of Soils	CVL 434	1	4	3
	ELECTRICAL: Electric Circuits	EES 512	1	3	2†
	MATHEMATICS: Statistics	MTH 410	1	3	1
				16	**11**

† Tutorial

PROPOSED PROGRAM CHANGES FOR 2014/2015

Bachelor of Engineering (Civil Engineering)

THIRD SEMESTER

Common to the Regular Program and the Structural Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:					
	CIVIL: Environmental Science and Impact Assessment	CVL 300	1	3	1†
	CIVIL: Strength of Materials I	CVL 320	1	4	2
	CIVIL: Fundamentals of Surveying	CVL 323	1	3	3
	CIVIL: Geology for Engineers	CVL 423	1	3	1†
	MATHEMATICS: Differential Equations and Vector Calculus	MTH 425	1	4	2
				17	**9**

~~** Two hour lab every second week.~~
† Tutorial

NOTE: All required core courses in 1st and 2nd semester are prerequisites to all required core courses in in 3rd semester.

FOURTH SEMESTER

Common to the Regular Program and the Structural Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:					
	COMMUNICATION: Communication in the Engineering Professions	CMN 432	1	2	2
	CIVIL: Transportation Engineering	CVL 316	1	3	1†
	CIVIL: Hydrology and Water Resources	CVL 400	1	3	1/1†
	CIVIL: Probability and Statistics for Engineers	CVL 405	1	3	1†
	CIVIL: Strength of Materials II	CVL 420	1	3	2
	CIVIL: Geotechnical Properties of Soils	CVL 434	1	3-4	2
				17	**10**

† Tutorial

CURRENT PROGRAM

Bachelor of Engineering (Civil Engineering)

FIFTH SEMESTER

Common to the Regular Program and the Geomatics Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab.*
REQUIRED:					
	CIVIL: Structural Analysis	CVL 313	1	3	2†
	CIVIL: Geomatics Measurement Techniques	CVL 352	1	3	2
	CIVIL: Concrete Materials	CVL 533	1	3	2
	CIVIL: Environmental Science and Engineering	CVL 553	1	4	2
	MATHEMATICS: Numerical Analysis	MTH 510	1	3	1
LIBERAL STUDIES ELECTIVE GROUP A: **One course required from Table A.**			1	3	
				19	**9**

† Tutorial

SIXTH SEMESTER

Common to the Regular Program and the Geomatics Engineering Option

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab.*
REQUIRED:					
	COMMUNICATION: Communication in the Engineering Professions	CMN 432	1	2	2
	CIVIL: Transportation Engineering	CVL 316	1	3	2†
	CIVIL: Structural Concrete Design	CVL 410	1	3	2
	CIVIL: Civil Engineering Systems	CVL 609	1	3	2
	CIVIL: Highway Materials	CVL 633	1	3	2
LIBERAL STUDIES ELECTIVE GROUP B: **One course required from Table B.**			1	3	
				17	**10**

† Tutorial
NOTE: Students who have a CLEAR Academic Standing may opt to enroll in the Industrial Internship Program (IIP). Eligible students should select WKT 90A/B on the course intention form – Please contact the Department of Civil Engineering.

PROPOSED PROGRAM CHANGES FOR 2014/2015

Bachelor of Engineering (Civil Engineering)

FIFTH SEMESTER

Civil Engineering Program

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab.*
REQUIRED:					
	CIVIL: Geomatics Measurements and Analysis	CVL 352	1	3	2
	CIVIL: Introduction to Structural Design	CVL 500	1	3	2†
	CIVIL: Fluid Mechanics and Hydraulics	CVL 501	1	3	1/1†
	CIVIL: Concrete Materials	CVL 533	1	3	2
	MATHEMATICS: Numerical Analysis	MTH 510	1	3	1
LIBERAL STUDIES ELECTIVE GROUP A: **One course required from Table A.**			1	3	
				19	**9**

† Tutorial

SIXTH SEMESTER

Civil Engineering Program

	Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab.*
REQUIRED:					
	CIVIL: Remote Sensing and Image Anal	CVL 354	1	3	2
	CIVIL: Wastewater Engineering	CVL 601	1	3	1
	CIVIL: Civil Engineering Systems	CVL 609	1	3	2
	CIVIL: Highway Materials	CVL 633	1	3	2
	CIVIL: Highway Design	CVL 735	1	3	2
LIBERAL STUDIES ELECTIVE GROUP B: **One course required from Table B.**			1	3	
				18	**9**

† Tutorial

NOTE: Students who have a CLEAR Academic Standing may opt to enroll in the Industrial Internship Program (IIP). Eligible students should select WKT 90A/B on the course intention form – Please contact the Department of Civil Engineering.

CURRENT PROGRAM

Bachelor of Engineering (Civil Engineering)

SEVENTH SEMESTER

Regular Civil Engineering Program

	Course Title	Course Number	Duration In Terms	Lecture	Lab.
REQUIRED:					
	CIVIL: Structural Steel Design	CVL 411	1	3	2
	CIVIL: Capstone Design Project I	CVL 755	1	1	3†
PROFESSIONAL: Students complete two courses from any ONE of the Streams listed below. Not all courses will be offered every semester.					
ENVIRONMENTAL STREAM – TWO OF:					
	CIVIL: Wastewater Treatment Design	CVL 638	1	3	1**
	CIVIL: Municipal Solid Waste Management	CVL 901	1	3	1†
	CIVIL: Water Resources Engineering	CVL 903	1	3	1†
	CIVIL: Environmental Impact Assessment	CVL 912	1	3	1†
STRUCTURAL AND MATERIALS STREAM – TWO OF:					
	CIVIL: Computer Aided Structural Analysis	CVL 312*	1	3	2†
	CIVIL: Foundation Engineering	CVL 600	1	3	2†
	CIVIL: Pavement Design and Management	CVL 900	1	3	1†
	CIVIL: Structural Concrete Design II	CVL 904	1	3	1†
	CIVIL: Bridge Design and Construction	CVL 905	1	3	1†
	CIVIL: Renovation/Repair of Existing Structures	CVL 906	1	3	1†
	CIVIL: Behaviour & Design of FRP Structures	CVL 907	1	3	1†
	CIVIL: Structural Building Systems	CVL 908	1	3	1†
***CVL 311** must be selected in Structural and Materials Stream					
TRANSPORTATION STREAM – TWO OF:					
	CIVIL: Pavement Design and Management	CVL 900	1	3	1†
	CIVIL: Traffic Operations and Management	CVL 902	1	3	2†
	CIVIL: Non-Highway Transportation Systems	CVL 909	1	3	1†
	CIVIL: Transportation Planning	CVL 910	1	3	1†
LIBERAL STUDIES ELECTIVE GROUP A: One course required from the following:					
	ENGLISH: Science Fiction	ENG 503	1	3	
	GEOGRAPHY: Tech and the Cont. Env	GEO 702	1	3	
	HISTORY: Sci. Tech & Modern Society	HST 701	1	3	
	PHILOSOPHY: Relig, Sci and Philosophy	PHL 709	1	3	
	POLITICS: Power, Change and Technol	POL 507	1	3	
				13	**7-9**

†Tutorial

** Two-hour lab every second week.

PROPOSED PROGRAM CHANGES FOR 2014/2015

Bachelor of Engineering (Civil Engineering)

SEVENTH SEMESTER

Civil Engineering Program

	Course Title	Course Number	Duration In Terms	Lecture	Lab.
REQUIRED:					
	CIVIL: Geospatial Information Systems	CVL 736	1	3	2
	CIVIL: Capstone Design Project I	CVL 755	1	1	3†
PROFESSIONAL: Students complete two courses from any ONE of the Streams listed below.					
ENVIRONMENTAL STREAM – TWO OF:					
	CIVIL: Water Resources Engineering	CVL 903	1	3	1
	CIVIL: Water Supply Engineering	CVL 913	1	3	1/1
TRANSPORTATION STREAM – TWO OF:					
	CIVIL: Traffic Operations and Management	CVL 902	1	3	1
	CIVIL: Transportation Systems Planning	CVL 910	1	3	1
LIBERAL STUDIES ELECTIVE GROUP A: One course required from the following:					
	ENGLISH: Science Fiction	ENG 503	1	3	
	GEOGRAPHY: Tech and the Cont. Env	GEO 702	1	3	
	HISTORY: Sci. Tech & Modern Society	HST 701	1	3	
	PHILOSOPHY: Relig, Sci and Philosophy	PHL 709	1	3	
	POLITICS: Power, Change and Technol	POL 507	1	3	
				13	**7/8**

†Tutorial

** Two-hour lab every second week.

CURRENT PROGRAM

Bachelor of Engineering (Civil Engineering)

EIGHTH SEMESTER

Regular Civil Engineering Program

	Course Title	Course Number	Duration In Terms	Lecture	Lab.
REQUIRED:					
	COMMON ENGINEERING: Law and Ethics in Engineering Practice	CEN 800	1	3	
	CIVIL: Project Management	CVL 742	1	3	1
	CIVIL: Capstone Design Project II	CVL 855	1	1	3†
PROFESSIONAL: Students complete two courses from any ONE of the Streams listed below. Not all courses will be offered every semester.					
ENVIRONMENTAL STREAM – TWO OF:					
	CIVIL: Municipal Solid Waste Management	CVL 901	1	3	1†
	CIVIL: Water Resources Engineering	CVL 903	1	3	1†
	CIVIL: Environmental Impact Assessment	CVL 912	1	3	1†
STRUCTURAL AND MATERIALS STREAM – TWO OF:					
	CIVIL: Computer Aided Structural Analysis	CVL 312*	1	3	2†
	CIVIL: Foundation Engineering	CVL 600	1	3	2†
	CIVIL: Pavement Design and Management	CVL 900	1	3	1†
	CIVIL: Structural Concrete Design II	CVL 904	1	3	1†
	CIVIL: Bridge Design and Construction	CVL 905	1	3	1†
	CIVIL: Renovation/Repair of Existing Structures	CVL 906	1	3	1†
	CIVIL: Behaviour & Design of FRP Structures	CVL 907	1	3	1†
	CIVIL: Structural Building Systems	CVL 908	1	3	1†
***CVL 312** must be selected in Structural and Materials Stream					
TRANSPORTATION STREAM – TWO OF:					
	CIVIL: Highway Design	CVL 735	1	3	2†
	CIVIL: Pavement Design and Management	CVL 900	1	3	1†
	CIVIL: Traffic Operations and Management	CVL 902	1	3	2†
	CIVIL: Non-Highway Transportation Systems	CVL 909	1	3	1†
	CIVIL: Transportation Planning	CVL 910	1	3	1†
				13	**6-8**

†Tutorial

PROPOSED PROGRAM FOR 2014/2015

Bachelor of Engineering (Civil Engineering)

EIGHTH SEMESTER

Civil Engineering Program
Civil Engineering Program

	Course Title	Course Number	Duration In Terms	Lecture	Lab.
REQUIRED:					
	COMMON ENGINEERING: Law and Ethics in Engineering Practice	CEN 800	1	3	
	CIVIL: Geodesy and Satellite Positioning	CVL 650	1	3	2
	CIVIL: Project Management	CVL 742	1	3	1
	CIVIL: Capstone Design Project II	CVL 855	1	1	3†
PROFESSIONAL: Students complete the course listed in the Streams below					
ENVIRONMENTAL STREAM					
	CIVIL: Municipal Solid Waste Management	CVL 901	1	3	1
TRANSPORTATION STREAM					
	CIVIL: Pavement Design and Management	CVL 900	1	3	1
				13	**7**

†Tutorial

CURRENT PROGRAM

Bachelor of Engineering (Civil Engineering)

SEVENTH SEMESTER

Geomatics Engineering Option

Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab.*
REQUIRED:				
CIVIL: Satellite Geodesy	CVL 650	1	3	2
CIVIL: Photo. And Digital Mapping	CVL 710	1	4	3
CIVIL: Geospatial Information Systems	CVL 736	1	3	2
CIVIL: Data Model. and Estimation	CVL 737	1	3	2
LIBERAL STUDIES ELECTIVE GROUP A:		1	3	
One course required from the following:				
ENGLISH: Science Fiction	ENG 503	1	3	
GEOGRAPHY: Tech. and the Cont. Env.	GEO 702	1	3	
HISTORY: Sci. Tech. and Modern Soc.	HST 701	1	3	
PHILOSOPHY: Relig, Sci & Philosophy	PHL 709	1	3	
POLITICS: Power, Change and Tech.	POL 507	1	3	
			16	**9**

EIGHTH SEMESTER

Geomatics Engineering Option

Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab.*
REQUIRED:				
COMMON ENGINEERING: Law and Ethics in Engineering Practice	CEN 800	1	3	
CIVIL: Remote Sensing & Image Analysis	CVL 354	1	3	2
CIVIL: Project Management	CVL 742	1	3	1
CIVIL: Geomatics Network Design & Analysis	CVL 810	1	3	2
CIVIL: Capstone Design Project II	CVL 855	1	1	3
			13	**8**

PROPOSED PROGRAM FOR 2014/2015

Bachelor of Engineering (Civil Engineering)

~~**SEVENTH SEMESTER**~~

~~**Geomatics Engineering Option**~~

~~*Course Title*~~	~~*Course Number*~~	~~*Duration In Terms*~~	~~*Lecture*~~	~~*Lab.*~~
~~**REQUIRED:**~~				
~~CIVIL: Satellite Geodesy~~	~~CVL 650~~	~~1~~	~~3~~	~~2~~
~~CIVIL: Photo. And Digital Mapping~~	~~CVL 710~~	~~1~~	~~4~~	~~3~~
~~CIVIL: Geospatial Information Sys.~~	~~CVL 736~~	~~1~~	~~3~~	~~2~~
~~CIVIL: Data Model. and Estimation~~	~~CVL 737~~	~~1~~	~~3~~	~~2~~
~~**LIBERAL STUDIES ELECTIVE GROUP A:**~~		~~1~~	~~3~~	
~~**One course required from the following:**~~				
~~ENGLISH: Science Fiction~~	~~ENG 503~~	~~1~~	~~3~~	
~~GEOGRAPHY: Tech. and the Cont. Env.~~	~~GEO 702~~	~~1~~	~~3~~	
~~HISTORY: Sci. Tech. and Modern Soc.~~	~~HST 701~~	~~1~~	~~3~~	
~~PHILOSOPHY: Relig, Sci & Philosophy~~	~~PHL 709~~	~~1~~	~~3~~	
~~POLITICS: Power, Change and Tech.~~	~~POL 507~~	~~1~~	~~3~~	
			~~**16**~~	~~**9**~~

~~**EIGHTH SEMESTER**~~

~~**Geomatics Engineering Option**~~

~~*Course Title*~~	~~*Course Number*~~	~~*Duration In Terms*~~	~~*Lecture*~~	~~*Lab.*~~
~~**REQUIRED:**~~				
~~COMMON ENGINEERING: Law and Ethics in Engineering Practice~~	~~CEN 800~~	~~1~~	~~3~~	
~~CIVIL: Remote Sensing & Image Anal~~	~~CVL 354~~	~~1~~	~~3~~	~~2~~
~~CIVIL: Project Management~~	~~CVL 742~~	~~1~~	~~3~~	~~1~~
~~CIVIL: Geomatics Network Des & Anal~~	~~CVL 810~~	~~1~~	~~3~~	~~2~~
~~CIVIL: Capstone Design Project II~~	~~CVL 855~~	~~1~~	~~1~~	~~3~~
			~~**13**~~	~~**8**~~

PROPOSED PROGRAM FOR 2014/2015

Bachelor of Engineering (Civil Engineering)

FIFTH SEMESTER

Structural Engineering Option

Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:				
CIVIL: Structural Analysis	CVL 313	1	3	2+
CIVIL: Introduction to Structural Design	CVL 500	1	3	2+
CIVIL: Concrete Materials	CVL 533	1	3	2
CIVIL: Foundation Engineering	CVL 600	1	3	2+
MATHEMATICS: Numerical Analysis	MTH 510	1	3	1
LIBERAL STUDIES ELECTIVE GROUP A:		1	3	
One course required from Table A.				
			18	**9**

+ Tutorial

SIXTH SEMESTER

Structural Engineering Option

Course Title	*Course Number*	*Duration In Terms*	*Lecture*	*Lab/Tut.*
REQUIRED:				
CIVIL: Computer Aided Structural Analysis	CVL 312	1	3	2
CIVIL: Structural Concrete Design I	CVL 410	1	3	2+
CIVIL: Structural Steel Design	CVL 411	1	3	2+
CIVIL: Civil Engineering Systems	CVL 609	1	3	2+
CIVIL: Highway Design	CVL 633	1	3	2
LIBERAL STUDIES ELECTIVE GROUP B:		1	3	
One course required from Table B.				
			18	**10**

+ Tutorial

PROPOSED PROGRAM CHANGES FOR 2014/2015

Bachelor of Engineering (Civil Engineering)

SEVENTH SEMESTER

Structural Engineering Option

Course Title	*Course Number*	*Duration in Terms*	*Lecture*	*Lab.*
REQUIRED:				
CIVIL: Capstone Design Project I	CVL 755	1	1	3†
CIVIL: Structural Concrete Design II	CVL 904	1	3	2†
CIVIL: Bridge Design and Construction	CVL 905	1	3	1†
CIVIL: Structural Building Systems	CVL 908	1	3	2†
LIBERAL STUDIES ELECTIVE GROUP B:				
One course required from the following.				
ENGLISH: Science Fiction	ENG 503	1	3	
GEOGRAPHY: Tech and the Cont. Env	GEO 702	1	3	
HISTORY: Sci. Tech & Modern Society	HST 701	1	3	
PHILOSOPHY: Relig, Sci and Philosophy	PHL 709	1	3	
POLITICS: Power, Change and Technol	POL 507	1	3	
ENGLISH: Science Fiction	ENG 503	1	3	
			13	**8**

† Tutorial

EIGHTH SEMESTER

Structural Engineering Option

Course Title	*Course Number*	*Duration in Terms*	*Lecture*	*Lab.*
REQUIRED:				
COMMON ENGINEERING: Law and Ethics in Engineering Practice	CEN 800	1	3	
CIVIL: Project Management	CVL 742	1	3	1†
CIVIL: Capstone Design Project II	CVL 855	1	1	3†
CIVIL: Pavement Design and Management	CVL 900	1	3	1†
CIVIL: Renovation/Repair of Existing Structures	CVL 906	1	3	1†

Recommendation

- Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the Curriculum Modifications to the Bachelor of Engineering (Civil Engineering) degree program in the Department of Civil Engineering.*

Respectfully Submitted,

Chris Evans, Chair for the Committee

ASC Members:
Charmaine Hack, Registrar
John Turtle, Secretary of Senate
Chris Evans, Vice Provost Academic
Denise O'Neil Green, Assistant Vice President/Vice Provost, Equity, Diversity and Inclusion
Andrew Hunter, Faculty of Arts, Philosophy
Neil Tomlinson, Faculty of Arts, Politics
Ian Baitz, Faculty of Communication and Design, Graphic Communications Management
Jean Bruce, Faculty of Communication & Design, Image Arts
Mary Sharpe, Faculty of Community Services, Midwifery
Nick Bellissimo, Faculty of Community Services, Nutrition
Medhat Shehata, Faculty of Engineering and Architectural Science, Civil Engineering
Colin Ripley, Faculty of Engineering and Architectural Science, Architecture
Catherine Beauchemin, Faculty of Science, Physics
Vadim Bostan, Faculty of Science, Chemistry & Biology
Kelly McKay, Ted Rogers School of Management, Hospitality & Tourism
Naomi Eichenlaub, Library
Des Glynn, Chang School of Continuing Education
Esztella Vezer, Faculty of Arts, Psychology